# SECURITY

## PRODUCTS CATALOGUE

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## BACTERIAL CONTAMINATION TESTS

### Bacterial Contamination Test

The Bacterial Contamination Test is easy to operate and provides fast, accurate measurement of bacterial contamination in platelets.

**Overview**
The newest healthcare technology, the Bacterial Contamination Test, is a rapid QC test for the detection of bacterial contamination in blood platelets. Based on a novel, easy to use lateralflow technology platform, the test requires approximately 1mL of a platelet sample and can be run from start to finish in approximately 20 minutes.
The Bacterial Contamination Test quickly detects bacteria of concern in either apheresis or whole blood-derived platelets. Preliminary results indicate an assay sensitivity of approximately 103–104 CFU/mL.
To ensure that results are interpreted objectively and with optimum accuracy, the Bacterial Contamination Test includes a high sensitivity reader that automatically logs test results in a computerized database. Data integrates seamlessly with existing networks so that it may be sorted, exported, and printed with ease.
The Bacterial Contamination Test is being designed to meet all of the critical blood banking requirements:

- Rapid—Results obtained in approximately 20 minutes
- Sensitive—Sensitivity in the range of 103–104 CFU/mL
- Ease of Use—Minimal training and attended labor
- Objective Results—Reader maximizes sensitivity and objectivity
- Automated Data Collection—software automatically logs test data
- Cost Effective

### Prime Alert
BioDetection System

Prime Alert's easy-to-carry kit comes with everything needed to quickly and accurately screen for all CDC identified bacterial agents of concern.
**Overview**
Biological threats are here to stay. First Responders, military branches and corporations across the nation are taking action to calm fear and reduce economic impact.
What good is a powder test that detects only a few dangerous agents? Negative results only leave you with more questions and put your community at risk.
Prime Alert is the only field-proven solution that screens for ALL CDC identified bacterial agents of concern, and tests for toxins in the time it takes to perform one anthrax test.
**Features and Benefits:**

- Testing with Prime Alert is fast and extremely accurate, which reduces personnel time spent in a potentially hazardous location.
- Prime Alert brings closure and peace-of-mind in "false alarm" situations.
- Fast, easy,and accurate testing limits the disruption of productivity in your facility.
- More costly testing and personnel time can be utilized for genuine threats.
- Comprehensive training material included.

### TMP-Alpha - Long range locator for A-H1N1 & H1N1

With the TMP-Alpha long range locator, we now have the technology to work in many areas within most levels of today's security market. Due to the ever increasing security climate we now provide a locator to operate on the frequencies of the new Swine flu virus A- H1N1 and H1N1.

FIELDMARSHAL supply purposely built locators to detect A-H1N1 and H1N1, these locators have an effective range of over 300 meters, thus designed to keep the operator at a safe distance, away from possible contamination.

The TMP-Alpha is a device that uses a revolutionary technology to locate from distance, substances like drugs, explosives and various types of virus. For many security professionals the TMP-Alpha is the first tool to be used when searching for illegal and control substances.

## SECURITY AREA CONTROL

### Bullet, implosion and splinter resistant coating for glass

The main component of the coating is a thermoplastic polyester fibre made up of polyethylene terephthalate (PET). This part-crystalline fibre is extremely strong and resistant to moulds and many chemical agents.
The coating is produced using a specific lamination process improving its resistance a considerable amount.
Using layers of PET and acrylic based adhesive responsive to pressure, it is possible to achieve extremely resistant films, which are also completely transparent. Furthermore, the film has a 98%-99% UV filter property.
The film comes with a lifelong guarantee against discolouration, peeling, cracking and delaminating.

**Effective prevention of:**

- Damage to furniture and other objects due to broken glass
- High repair costs of such damage
- House insurance cost increase (i.e. this product could decrease the cost of your insurance)
- Flesh wounds
- Damage to the house after a window is broken due to environmental factors (rain, wind etc.)

Furthermore, it reinforces glass fixtures against damage caused by storms, strong winds, explosion pressure and shrapnel and it can resist the impact of small missiles/rockets.

### TMP-S CAM
### 33G & Wi-Fi mobile surveillance system in real time

TMP-S Cam has a Unique ability to Send and View from Multiple Locations Simultaneously, plus the ability to view live streams on your PC, Mobile Phone and PDA. Windows based software; Easy to set up - Easy to use.
Training and Support are included.

TMP-S Cam can be Carried covertly, Placed out of view or Mounted in a vehicle. It can be used to Monitor Blackspots, Crime scenes and Busy areas without the need for wires and complicated setups.

TMP-S Cam provides real-time, mobile surveillance that uses multiple connection types such as 3G, GPRS, HSDPA and WLAN. makes use of existing technologies in a way that provides a fully scalable and reliable mobile surveillance system.

**System Components**
The system comprises of three parts; The Transmitter, the Viewer and the Relay. These three parts are used to send, manage and view the video streams.

### Under-vehicle surveillance system

The first Under Vehicle Surveillance System purposely designed for temporary deployment. The system can be set-up within a few seconds and utilises state-of-the-art cameras and LED illuminators for excellent picture quality.
Inbuilt video motion detector automatically starts the recording process when a vehicle comes into view.

The images from the digital recorders are displayed on 2 inbuilt 6.4” high resolution monitors.
A hand held control unit is also provided to allow simultaneous operation of key functions on the digital recorders.

- Galvanized Steel Ramp and Shoulders
- Weatherproof Cameras and Led Lamps
- Modular construction for easy service
- All internal connections use waterproof plugs and sockets
- Connection from either side
- Highly portable for temporary deployment
- Highly portable for temporary deployment
- 2 x Digital Video Recorders with hot swappable drives
- 2 x 6.4” High Resolution Video Monitors

| | |
|---|---|
| | • Integral UPS for 30 Minutes Back-up<br>• Operates from Mains or 12V dc<br>• Lamp intensity control<br>• Outputs from both recorders to external devices |
| | |
| **Sys-Plate - Automatic licence plate recognition system**<br> | Sys Plate is an advanced vehicles logging and image database management system, that has a wide appeal for commercial and government users. The system includes a fully interactive and integrated platform for a wide range of static and mobile applications from access control to motorway surveillance. It provides state-of-the-art intelligence support for surveillance needs of the Police, Military or Paramilitary organizations. Commercial applications include car park management, estate management and journey time analysis. The system monitors the traffic via ANPR cameras and can be used to match passing vehicles against a target list and record multiple colour overview images of the car from high resolution or pulsed infrared cameras as the plate is captured. As well being strategically positioned in static situation, the system can also be installed in a vehicle or transportable containers.<br>**What can SYS-PLATE do?**<br>• Log vehicles with multiple images, retrieved the relevant plate number and alert staff to vehicles of interest.<br>• Store all information relevant to traffic movement, including time, date and location number in a dedicated database for advanced statistical analysis.<br>• Streaming infrastructure to communicate in TCP/IP environment to remote sites over LAN, WAN, wireless.<br>• Possibility to be used with a Palm handheld and send SMS, Text messages to mobile phones.<br>• High speed vehicles plate recognition (200KpH) and 24HR/365 day operation.<br>The system is based on TCP/IP network infrastructure utilizing Client/Server type architecture. |
| | |
| **Automatic container code recognition software**<br> | Fast, accurate and cost-effective solution for Automatic Container Code Recognition (ACCR).<br>Growing need is seen for Automatic Container Code Applied recognition technology needs to be fast and accurate.<br>This reliability is guaranteed by more than a decade of development investment into the world leader OCR technology.<br>Special container camera system is available to produce optimal images for high reading accuracy.<br>These technology experts understand the specific needs of their customer and they build complete systems exactly according to their expectations.<br>**K**<br>**ey features:**<br>• High recognition rate<br>• Easy and fast integration (SDK)<br>• Fast recognition<br>• Possibility of recognition from several images of the same container<br>• Ability to recognize horizontal and vertical text, two or three row codes<br><br>**Typical application environments:**<br>• Automation of airport and harbor logistics<br>• Border control management<br>• Container surveillance systems<br>• Inventory management |
| | |
| **Stereoscopic HD Video Camera**<br> | **Features:**<br>• Cutting-edge 3D technology<br>• High-definition format quality<br>• Ultra-compact size<br>• Dual genlock system<br>• 10x zoom lens<br>• Automatic convergence control<br><br>Featuring the most advanced technology in the world today, our new SHVC offers the highest levels of control and convenience low-cost in the field of commercial video production.<br><br>Our system includes a 10x zoom lens for LR sync and automatic convergence control and ensures enhanced flexibility and ease of operation for all members of your crew.<br><br>If you have any questions or comments, please contact us. We would love to hear from you. |
| | |

## Urban Intelligent Software

UrbanShield is a state of the art innovative software platform, integrating best-of-breed C4I Applications for Intelligence agencies, Police departments and Crisis Management organizations, enabling them to get intelligence information from raw video and other sources..

**Urban Intelligent Software Overview**

- An open, secure, redundant and scalable system which captures, records and manages video from various sources
- Smart, real-time content analysis
- Innovative C4I functions by utilizing 3D GIS maps
- Built-in integration with MM & ISPE\
- On-line/Off-line video investigation tools
- Long-term video archiving management
- Integrates with emergency organizations systems

**Operational Concept**

- Coverage of sites potentially related to terrorist or criminal activities
- Customized Areal Coverage based on threat analysis
- Detection and alert generation of suspicious objects and activities
- Operational procedures for controlling dispatched forces
- Alert driven surveillance and tracking abilities

## SIM-Mobile Laser System Detection Range 1200m

**Detects Optical and Opto-Electronic Devices**

Features: Detection of snipers, hidden pinhole cameras, covert video or photo shooting, and of laser systems like optical stethoscopes. System may operate in total darkness or even against bright light sources. Handheld unit with a detection range of 1200m.

## Fire Prevention and Monitoring System

**Objectives:**

Efficient , early and documentable support of the fire prevention activity, by a constant monitoring of the territory based on sophisticated technologies. Enhance the emergency intervention efficiency, by an informative coordination within the operative units in a context of procedure and means already operative. Allowance of a subsequent forensic activity, rebuilding in a comprehensive way the critical situations using the historical resources in order to improve calibration of decisional and operative criterion.

**Characteristics:**

Since the context of criticality in which the system operate, it must feature specific requirements in terms of liability and toughness, to be able to operate in extreme conditions. Safe, easily scalable , expandable and exportable, fundamentally independent from the used technology (cameras in particular) not to involve variations of the software components. It must allow the utmost informative affluence for an efficient evaluation and definition of the parameters and critical situation.

As result of all the described features, it can be defined as a Support system to the decisions, substantially distributed, interfaceable and configurable for the constant monitoring of the territory and early evidence of firefighting situations to support the emergency interventions.

The vital premise for the system efficiency is the large amount of data and cartographic information characterizing the territory.

## TMP-Fire-Barrier - Fire Control and Prevention System

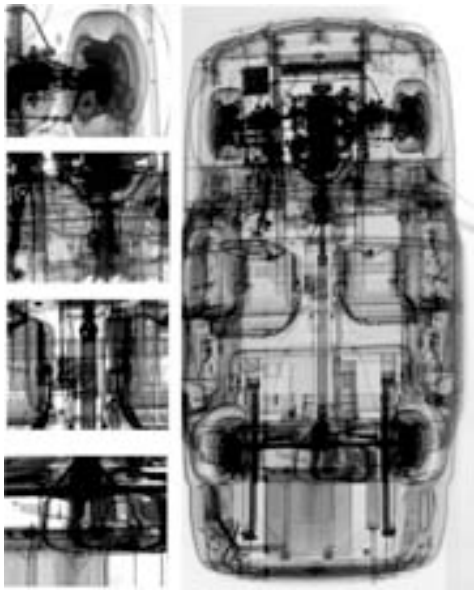
**TMP-Fire-Barrier** is a low cost and innovative product especially designed for fire control and prevention. It is an excellent containing barrier to stop a fire spreading either in a forest zone or in industrial and residential areas.
This prevention system forms a barrier where it has been sprayed - even in dry conditions - wrapping the mass and avoiding the combustion of the treated materials thus protecting them from being altered, even by fine drizzle. Once the water from the emulsion has evaporated, its fire protection qualities acting as a barrier on dry conditions are excellent and provide long term protection.
In order to provide an easy use, the product has been colored to distinguish already treated areas. It has also an excellent performance as a fire extinguisher, even better in fact, since water fixes on incandescent mass preventing air from entering into the triangle of fire.
On the whole, it works avoiding contact between oxygen and the combusting material so it becomes fireproof in average flame temperatures. It prevents gas loss from hot materials preventing their combustion in this way. It is equally efficient both after being just sprayed and after having dried. It stays unaltered on the treated material until it is washed away by rain or sprinklers. It is compatible with any traditional fire control system.

## Local Information Improvement System With Local and/or Remote Information of Manual and/or Automated Type

The system seeks the information, voice and language, of vehicular traffic on the basis of scientific and automatic data source and / or manual, which is circulated locally to the transiting vehicle, also individually. The system allows to search for a rational vehicular movement, to obtain a safer and more fluid movement through the use of electronic and computer technologies; compatibility with the environment with immediate and positive effecs in the ecological, economic, human, civil protection and saving of energy resources.

The system provides local information to the user by a receiver installed on board the vehicle vocally reproducing coded information transmitted by equipment at the side of the road, which are coordinated by computers. An equipment electronically collects information useful in assessing the roads' viability, and visibility of the transitability to allow drivers to communicate vehicle information locally relevant to the direction of march. The system is grafted on a differentiated levels of information structures that provide the data processing at local, provincial, regional, interregional, national and international levels through properly powered computers for the desired synthesis level, together interconnected and adequately parameterized.

## TMP-Auto - Inspection complex



TMP-Auto complex is designed for inspection of passenger cars, 4x4s, Multi Purpose Vehicles and minivans. It detects drugs, explosives (including plastic), radioactive materials, smuggled arms, dangerous objects such as knives, metal batons, spikes, etc. The main component of the complex is an X-ray generator. It produces high energy collimated bremsstrahlung and has a П-shaped detector. Main advantages of this design are nondestructivity, low dose load and high penetration, high productivity due to high sensitivity of the detector.
Complex is placed in a 20 ft container. It can be equipped with heating or air conditioning facilities. It is designed to work 24/7, all-year-round. The inspection is carried out automatically. Images are transmitted to the control unit based in a minivan or portable computer.
**System composition:**
20ft container (with heating or/and air conditioning), data collection system, objects movement control system, Xray generator, data processing system, remote control unit (integrated in a minivan with diesel generator or based on a portable computer)
**Size of objects to be inspected:**
2100 (width) x 2100 (height) x 6300 (length) mm.*
* the system could be optimized to the customer's needs
**Output:** Up to 10 objects per hour.
**Scan speed** Up to 10 cm/s.
**X-ray generator:**
Uniquely designed X-ray generator 200kV*
* the system could be optimized to the customer's needs
**Detector:** П-shaped one dimensional.
**Output data format:** 16-bit image in different palettes.
**Size of the detector element:**
1.6 mm x 1.6 mm *
* the system could be optimized to the customer's needs

## Coastal and Border Surveillance

**Integrated Systems for Monitoring Ports, Coastlines and Land Borders**
**TMP Systems Provide Safety and Security to the World's Waterways and Marine Resources**

**Sensor Suite**
**TMP-MTM300 Processing**

- Multiple sensor correlation

- Target tracking
- Track and database integration
- Rule-based decision aids
- Vessel movement reports
- Track histories
- Ship ID and characteristics

**Applications for Maritime Information Management Technology**
FIELDMARSHAL applies its core information management and integration technologies to the following maritime applications:

**Coastal and Maritime Security and Surveillance** — Multiple sensor integration, information processing, storage, display and dissemination provide critical decision-making support. Wide-area surveillance systems detect, classify and track threats and disseminate information to the proper response personnel. Communications systems enable crossborder information sharing and cooperation among coast guards, customs, port authorities and emergency response agencies.
**Vessel Traffic Management** — Vessel Traffic Management Information Systems (VTMIS), integrating sensors, AIS (Automatic Identification Systems), commercial hardware, expert rule-based software and communications links, manage vessel traffic, monitor the waterway environment and support port and harbor resources.
**Commercial and Oil Port Management** — VTMIS and resource management tools are configured for port operators and logistics planners. Special sensors and systems for oil and gas ports increase the safety of vessel transit and berthing.
**Search and Rescue** — Linking shore-based emergency communications and command infrastructure to rescue services saves lives and property at risk in the maritime environment.

## Transportable Maritime Surveillance System

**Maritime Surveillance in a Transportable Package**
When you need to provide maritime security or safety in a hurry, or for a limited time, the Transportable Maritime Surveillance System is your turnkey solution. Equipped with powerful TMP-MTM200 processing and on-board sensors, our transportable system can be moved into place and be operational in a matter of hours, providing your organization with sensor coverage, communications and command and control comparable to any permanent installation. If you need surveillance of a broad or dynamic area, several systems can be configured strategically and managed from a single command post.
**Designed to Meet Your Critical Needs**
This rapidly deployable system is ideal for use by coast guards and other maritime authorities, military and first responders. Applications include surveillance of special maritime events, search and rescue, emergency response, disaster recovery and gap filling with permanent maritime and air surveillance sensors. In addition, the system can be configured to your unique requirements.
**Using the Proven TMP-MTM200 System**
Our transportable system offers the same TMP-MTM200 capabilities available in our fixed systems. TMP-MTM200 fully integrates sensor processing with data processes providing a multi-sensor data-fusion display and control, which enhances situational awareness and information evaluation. Rule-based software defines and aids detection and threats, tracks analysis and gives operators automatic alarms of security violations.

- **Tower and Operations Shelter Package**
- **Sensors**
- **Operator Consoles and Cabinets**
- **Processing**

## Vessel Management System

**Vessel Management System** is a web-based system that provides visibility to all documents relating to the Vessel at a centralized location.
The System facilitates vessel owners to view documents relating to their Vessel including the location status.

**Statutory Inspection reports**

Port State Control inspection reports (PSC) relating to the inspection carried out by the Port authorities can be centrally stored for each vessel.
Wetting Inspection reports relating to inspections done by the customer can also be made available for viewing by vessel owners for the individual vessels.

**Compliance to OCIMF & CDI**

Statutory reports complying with the standards formulated by Oil Companies International Marine Forum (OCIMF) and Chemical Distribution Institute (CDI) including the Harmonized Vessel particulars questionnaire (HVPQ) can be made available for Vessel owner's reference.

**Vessel Profile and Events**

This module provides the profile of each Vessel as per the standard specifications and information relating to scheduled inspections.
Vessel arrival and departure dates with destination details are also available.

**System Benefits:**

- Substantial reduction in time, effort and cost in the availability of timely and accurate data for the vessel owners.
- Centrally stored web based system facilitates access from anywhere, anytime for instant information.
- Only Authorized users can log into to the system and get the required data. This ensures security to the information available in the system.
- Data when stored in a database can be used for obtaining strategic information from the historical data. This will bring down the time and effort spent in retrieving critical data from the records, besides ensuring accuracy of information at any point in time.
- The system can also be extended to be used as a collaborative Intranet by establishing discussion forums between the Vessel owners and Ship Managers. Similar Discussion forums can also be established between the Vessel team and the Corporate Office. Such an extension would significantly bring down the time and cost involved in communication.

## TMP-Georadar Systems

The TMP-GPR realizes detailed subsoil profiles by a bandwidth radio impulse. This nondestructive survey is used in several fields, thanks to its widely versatile tools:

- Searches for sub-services and fluids losses (including contaminants)
- Provides geology survey, stratigraphy and hydrology
- Offers environmental surveys
- Allows the reinforcement in concrete detection, voids and fractures
- Allows archaeological investigation ( structures and handworks identification)
- Allows for the assessment of the road surface and railway embankments state

## Security Furniture Solutions

We offer custom-made technical furniture, with a comprehensive design, build and installation service. We have established our excellent reputation by placing great emphasis on understanding the individual needs of each of our customers and working in close partnership with them from initial concept through to design and installation.

**Applications**

CCTV control furniture and reception desks for a large variety of areas including:

* town and city centre CCTV
* retail outlets and shopping centres
* hotels, casinos and hospitals
* banks and other financial institutions
* airports and port authorities
* corporate, government and local government offices
* schools and universities

**Facilities and services**

* Free design consultations
* 3D-CAD drawings and colour-rendered images
* Consoles precision made using the latest CNC equipment
* Manufactured at our premises
* Completed projects can be viewed before installation
* Installation by our own experienced craftsmen
* Modification, expansion and relocation of existing installations
* Committed after-sales service

## TMP-CONTACTOR HELMET SUBMERSIBLE HELMET IP68 RATING

FIELDMARSHAL has a helmet available for use specifically by the Emergency Services and Search and Rescue in water based operations. Probably of the highest spec available, it is currently in use by US Navy Seals, Coastguard and Surf Rescue.

Using fully submersible components and a skull microphone, the helmet can be fully immersed in water of 7ft for 1 minute and not be affected. Coupled with its lightweight construction and fully tested against other manufacturers, this is the best available and can be connected to any portable two way radio.

**Weight:** 800g
**Sizes:** Small, Medium, Large, XL, XXL
**Colour:** Yellow, Black, Grey, White
**Microphone:** Bone vibration sensitive
**Speaker:** 2 x 1W, impendance 16ohm
**Cable:** coiled 4mm/500mm (Icom F50-F60) straight 4.2mm/800 (other radios)
**Connector:** 6 pin IP68 Bulgin 400 Series Buccaneer
**PTT:** 2 large left and right side buttons Operational temperature - 10 to +65C continuous

## AutoCam – Mobile Suveillance System

**The Autocam system was developed in order to provide road operators with a valuable operational support.**
Its modularity makes it particularly versatile and attractive in the performance of on-site office tasks.
Autocam is the on-board video device for the shooting and recording of current patrol car activities. Its prerogative is that, in addition to the recording on the on board PC, the shootings can be shared with the Operation Centre foa a direct operative envolvment of the Command.
The possibility to have an on-board PC enables the integration with Localization Systems, onboard navigators and the query of web databases, to activate relevant procedures and the managing of roads accidents, as well as the management of court proceedings, reports, service and all other activities and procedures related to external service, with the ability to georeference the site of intervention.
**The Patrol is equiped with:**

- 1 Central Unit and a touch screen monitor
- UMTS card for the connection to databases, stolen vehicles, ACI, ANCITEL etc.
- Bluetooth keyboard and printer
- Wireless card for data download
- Configurable onboard cameras
- Satellite navigation with the possibility to arrange for the sending to the intervention site also from the Central Control, etc.

## Operation Centers Systems for the Police Forces

The local Police Operation Centre is the sole administrative reference for the citizens, by which an immediate response, not only for emergency but also for for the routines operations, is expected. This is a system able to integrate digital and analogic communicaton systems with management system for the local Police.
The system is structured as a collector of information inputs to the Command, usable for the fulfilling of documents, communications etc.., and towards the Adminnistration and other organizations, offering the great advantage of the resources optimization.

- Event management and intervention cards login
- Native integration with analog and digital radio systems (Tetra)
- Integration with GSM/GPRS/UMTS/WI-FI communication systems
- Databases connectivity
- Detection of vehicles position on the territory(GPS) - Fleet management
- Alert e-mailing and fax to institutions
- Statistical analysis for qualitative and quantitative assessment of the service to the citizens
- Management systems integration for municipal police command

## Handheld Solutions for Police Forces

The greatest requirement for the activity performed by the local Police Headquarters personnel on the territory, is the organization and tracking it for later analysis.
**Tmp-Mobile** was created to meet this need, providing the Police agent with a tool, which in its utmost potential can turn into an effective Mobile Operation Center.
Based on hand held systems, the software module allows for the recording and scheduling of the task to be performed on the territory and its subsequent reporting.
The operator either on a patrol or by foot, is provided with a tool which enables to keep in touch with the Command, providing real-time information about its activities.
The ability to integrate with the software modules for the Operation Center, task reports, removals and traffic accidents , make it a unique tool for the proximity activity recording.
**With these modules the agent will be able to:**

- Record the activity
- Issue alerting for other agencies
- Issue task report to be completed at the Command
- Arrange for vehicles removal, manage, by compatible softwares, the penalties to the Highway Code

## Inmate Tracking System

**Multiple monitoring program -> Single Data Source**
**Single user interface -> Multiple notification modules**

**Greater Value, Enhanced Operational Efficiencies**
**Mix &- Match: Interchangeable Monitoring Tools**

- Overall cost reduction· hardware, software, and operations
- Comprehensive reporting, data management and information distribution

**One Tag Fits All • enhanced case management**
The Integrated Platform offers a full range of interchangeable electronic monitoring tools and communication technologies, enabling operators to integrate previously separate monitoring tools and software modules onto a single platform. The implementation of this unique concept enables significant financial and operational performance enhancements considerably improving control center and field officers workflow.

In addition, the same transmitters are compatible across the different field units and monitoring programs (RF, GPS, Alcohol Monitoring, Inmate Tracking), allowing for seamless and flexible transfer of offenders across different monitoring programs, resulting in enhanced programs and caseload management capabilities.
There is a host of applicable combinations to accommodate varying levels of supervision and cater to the evolving needs of intensive supervision schemes.

## Intel-Tool System – An Intelligent Inspection System

- Easily transported
- Uncomplicated to setup
- Straight forward to use
- Robust and reliable

**Intel-Tool Video Imaging Hub:**
The Intel-Tool Video Imaging Hub is the heart of each Intel-Tool inspection system and combines illumination, image control and management functions.

With the Intel-Tool images can be viewed, marked with the on screen text generator and quickly saved with ease.
Onboard digital storage media or the Intel-Tool's USB interface can be used to transfer images to a PC.

This remarkably small base unit can be used either in an Intel-Case or remotely at the inspection site.
The Intel-Tool has an all metal frame construction which provides the structural strength required for everyday use in the industrial work environment.

- Weight 2.5 kg (5.51 lb)
- Metal Halide lamp technology
- CompactFlash® digital storage media
- 12V DC Power Belt option
- On screen text generator
- Audio recording capability

## TMP-Life-Locator
## System for locating people under ruins

In search and rescue, moments can make the difference between life and death. Having the right tools is critical. When it comes to effectively and quickly locating trapped victims who are alive but buried in building debris or other material, TMP-LifeLocator is that tool.
TMP-LifeLocator's unmatched technology locates the position of victims trapped in disaster rubble. Providing more information to 1st Responders than simply location, the system can distinguish between immobilized or unconscious victims and those able to move. TMP-LifeLocator enables rescuers to cover larger areas of a disaster site than with conventional methods. Simply put, TMP-LifeLocator saves lives. Portable, wireless and effective through reinforced concrete and other building materials, TMP-LifeLocator eliminates the need for drilling and requires no complicated training.
The easy-to-use PDA control unit displays a black square when motion is detected. When only breathing is detected, a red circle is displayed. These icons indicate approximate distance to the victim from the sensor. TMP-LifeLocator senses victim movement or breathing in as little as 30 seconds.

**Features**

- Completely wireless, lightweight and portable
- Rugged/weatherized PDA control unit
- Low power requirements
- Weather and water resistant
- Ease of deployment

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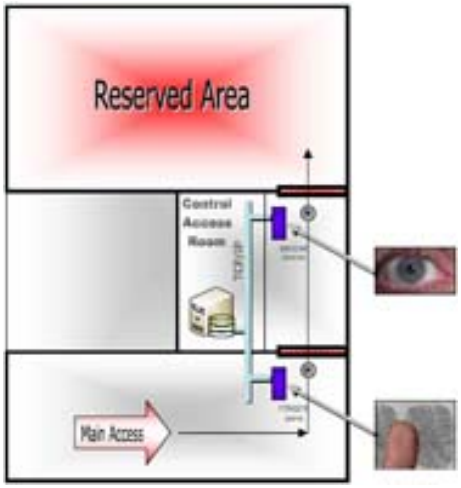
|---|---|
| | • FCC certified<br>• GSA - GS-24-F-1008B<br>• DHS Approved Equipment List |

| ACCESS CONTROLS | |
|---|---|
| **Sys-BioAccess - Access control with biometrical authentication**<br>  | **1. Biometrical applications**<br>Applications and possibilities to interact with other systems are nomally useful in the following contest:<br>• Access control to dedicated areas<br>• User certification<br>• Network and computer security<br><br>**Biometrical recognition methods**<br>**Retina recognition**<br>It is based on the acquisition and the verification of the human eye vascular map.<br>**Iris recognition**<br>This method is, so far, one of the most precise methods available. It's not affected by external problems niether subject to restrictions as a result of external or inner factors. No matter if someone is drug addicted, wearing contact lenses or affected by glaucoma, he can be easily identified.<br>**Fingerprints recognition**<br>This is a widely applied method wich benefits from the continuous development of the solid state sensors.<br>**Palm recognition**<br>Precise enough, this method is based on the shape and precise size analysis of the hand<br>**Face and voice**<br>Thsi method is frecquently used.<br>**The SYS-BioMetric system**<br>The solution is based on the optical iris reading and the authentication process management with a particular software application installed on a PC located in a safety area.<br>The software was developed by TempestiniGroup in order to satisfy the system requirements and faciliate the integration with the access gates automation systems. |
| | |
| **Biometric Facial Recognition System**<br> | **Objective analysis, evaluation and modification of facial images quality. Images features assessment and optimization within the International standards.**<br>**Setting**: The image quality is decisive for the biometric recognition.<br>The individuals' facial images allows for quick and accurate recognition – this is the reason why these images are included in official documents all over the world. The electronic passport – the new International passport – also includes, a a photo digital identification of the subject.<br>Facial images used in the facial biometrics recognition process must comply with specific quality standards. The machines' Images and characteristics must be objectively verified and optimized based on objective international standards , excluding all subjective criteria. The same requirements also apply to other electronic documents, such as the driving license and recognition/identity card.<br>NEC's experience in facial biometrics field, gained in over 30 years, as well as the fingerprint recognition, delivers solution of an extremely high professionalism in response to these new and complex issues. QTF solution is also available in SDK version, ensuring flexibility in the creation of a customized application on a personal requirements basis.<br>**Procedure**<br>A 3-step process for the modification for the rendering of images compatible with the biometric identification.<br>Facial images are analyzed and optimized by the system accordingly to the standard ISO 19794-5, which states the facial images' geometry and the setting requirements.<br>Digital facial images are processed in 3-step.. |
| | |
| **Wireless RF Biometric Access Control** | **Highly Secure Access System Upgrade and Expansion**<br>**Features & Benefits:**<br>• Flexible and secure access control solution offering integrated or standalone security.<br>• Biometric fingerprint security eliminates identity fraud and cannot be stolen, forged or forgotten.<br>• Wireless operation for maximum flexibility and hassle-free installation.<br>• Flexible RF communications allow for multi-receiver activation.<br>• Multiple receivers allow for increased functionality and multi-site utilisation.<br>• Save time and improve productivity with a one-off enrolment and simple subsequent identity checks. |

- Long range RF transmission Keeloq code hopping technology.
- Eliminate costs associated with key and card based systems.

## Verifier 3.0 - Voice Authentication Software for Secure Access over the Telephone

Verifier 3.0, advanced voice authentication software, enables businesses to provide secure access to sensitive information over the telephone. Like a fingerprint, Verifier voice authentication software creates individual voiceprints to authenticate callers and customers with just their voices, enabling secure access to information. Verifier 3.0 can also deliver improved caller satisfaction through convenient access to key automated speech solutions, including Financial & Retail transactions and account management, personal information access, time management, PIN reset, and benefit access. Adding voice authentication to these applications may result in increased use of automated systems and reduced fraud, saving Call Center costs. When deployed with speech recognition and textto-speech, businesses around the world can build a range of secure, cost effective applications that can increase automation and improve customer satisfaction.

**Meeting the security challenge: voice authentication**
**Reduce the costs of customer service by increasing automation**

## TMP-Bio Fingerprint Readers

TMP's fingerprint readers provide unrivalled facility security and positive identity verification without compromising user convenience.

**TMP-Flex**
Ideal for retrofits, the TMP-Flex adds a biometric layer of security to an existing external Wiegand reader or keypad.
The selfcontained fingerprint reader provides optimum security enhancement without reissuing cards or replacing existing readers.

**TMP-Prox**
This dualfactor solution combines a self-contained fingerprint module and a proximity reader in one modern package.
It eliminates concerns about stolen, loaned or compromised proximity cards.

**TMP-Pass**
This easy onetouch fingerprint identification reader recognises up to 500 users. Recognition is based on finger only no more PINs, keys or cards.

**TMP-Smart**
The BioSmart is a fingerprint reader associated with an external smart card reader (MIFARE). Fingerprint templates are securely stored on the cardholder's smart card.

## TMP-FP2000 - Finger Print Reader

**Advantages**

- Easy LED and LCD Instruction
- 16 digit keypad with 40 customizable function keys
- Able to work with or replace existing RFID Reader using Wiegand Protocol
- Alloy Zinc Casing for durability
- Flexible communications options including Wiegand I/O, TCP/IP, RS232 and RS422
- 4 Input, 2 Output points
- Firmware upgradeable
- Flash memory back up for event memory buffer
- Anti-tamper facility
- Cover lid offers extra protection for scanner
- Can use as standalone or in a network

**Features**

- User Registeration : 1,000 or 4,000 Users
- Transaction Memory Buffer : 24,000Transactions
- Up to 64 connections using RS422 converter / Unlimited using TCP/IP
- 16*2 Line Character LCD (Blue backlight)
- 16 digit keypad with 40 customizable function keys
- Audio Visual Indicator - Red LED : Access denied / Green Led : Access granted (with Audible Beep)
- FAR (False Acceptance Rate) = 0.0001%

- FRR (False Rehection Rate) = 0.01%
- Adjustable Fingerprint Recognition Level : 0~9 (10 Levels)
- Recognition Adjustment S/W (FDA) provided (Factory Set)
- KF-2000 : 1 door controller
- Compatible Cards : All HID RF Cards, EM Cards, Mifare Cards
- Networking Software - PLA-64, PLAT-4000, PLAT-Plus, PLA-Pro

## SGK - Secured Area Gateway Passage and Access Control

**SGK - Security Gate Keeper**

- Airport check-in, boarding gates
- Customs checkpoints, border controls
- Prison contraband detection efforts
- Government building access and exits
- Public transportation facilities

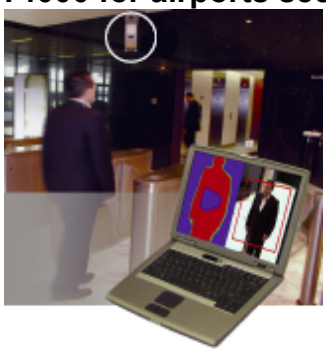
SGK is a security access control system, providing an easy-to-use voice analysis solution to determine whether or not the purpose of an individual's access to a secured area is legitimate.

SGK provides instant security verification and threat assessment before allowing access to high-risk facilities and secured and sterile zones.
Designed for rapid intention verification using input from only 3 to 5 questions, SGK will identify the overall emotional state of the subject during interrogation, allowing its operators to single out potential harmful intentions.

SGK is a state-of-the-art, reliable security measure, which significantly reduces embarrassing and unnecessary inconveniences to the largely legitimate public. In border control scenarios, one encounters diverse emotional structures that are not associated with criminal intent, e.g. exhausted travelers, excited vacationers, etc. The uniqueness of the SGK system is its ability to cluster and categorize these different emotional structures by learning to identify those that signal true intention to commit crimes or acts of terror.

Different locations require different means and methods for security checks, and SGK is primed to meet a variety of challenges. The diversity and flexibility ranges from a single language manually operated system to multilingual automated posts. The system can operate from a noisy and public high traffic area to a closed intimate checkpoint. SGK is specifically designed to meet your needs for any level of security.

## TMP-T4000 for airports security



**TMP-T4000 passive stand-off screening system**
**Screen for a wide range of concealed objects**
Metals, plastics, gels, explosives, composites, narcotics, currency, liquids.
**Screen from a safe stand-off distance**
Gain precious time to react at the earliest opportunity.
**Screen without introducing security 'bottlenecks'**
Screen people at various distances, as they move, – no need for static person screening at a single point.
**Safe and non-invasive**
Totally passive screening technology. No privacy violation, anatomical details are not revealed.

**See what's hidden**
The TMP-T4000 system is effective in many applications whether alone, or as part of a comprehensive, multi-layered security solution protecting your site and people. Monitor your entrances and exits, or even remotely image unattended locations. Use where protection of life, or need for loss prevention demands that you know who is concealing items and where they are concealing them. Screen for concealed plastics, composites, ceramics, metals and materials that can be crafted to create a suicide bomb or other threat (including liquid explosives). Image concealed contraband such as narcotics packages and locate concealed objects that are not picked up by metal detectors.

## TMP-Pass - e-Passport passenger face authentication solution

TMP-Pass is an e-Passport passenger face authentication solution. TMP-Pass ensures that only the legal bearer of the e-Passport is serviced by border control automatic gates, officers, boarding gate readers or agents etc. using advanced face recognition biometric methods.

**Features at a glance:**

- Kiosk type, embedded solution for border control posts, checks in counters, security gates and boarding gates, as well as duty free shops and VIP lounges entrances.
- e-Passports specifications are published in ICAO Doc 9303 and endorsed by ISO as ISO/IEC 7501.
- The face image is documented in ISO/IEC 19794-5:2005.
- Non intrusive, User friendly interface
- Passenger authentication speed less than 1 second
- Easy to use by airlines', airport's and security personnel
- Fast installation
- Efficient user interface ensures almost 100% identification accuracy
- Authentication attained by implementing sophisticated mathematical imaging face feature detection and matching
- Web based administration, database of transactions logging and access
- Build in database server for reporting and data export
- Master / chain configuration to synchronize multiple ID stations
- Stand alone or networked configuration
- Secured and encrypted database
- Scalable to any number of flights and passengers
- Covers passenger's height 1.50m – 2.10m
- Usability: 99.98%
- False Acceptance Rate: 0.01%
- False Rejection Rate: 2%
- Operation temperature: -5ºC to 50ºC
- Operation humidity: 10% to 90%
- Network interface via Ethernet.
- TMP-Pass facilitates easy fusion with other biometric solutions via BioAPI (ISO/IEC FDIS 24708).
- CE and FCC part 15 certified
- Terminal Dimensions Width 270 mm, Depth 750 mm, Height 503 mm, Weight 7.5 Kg

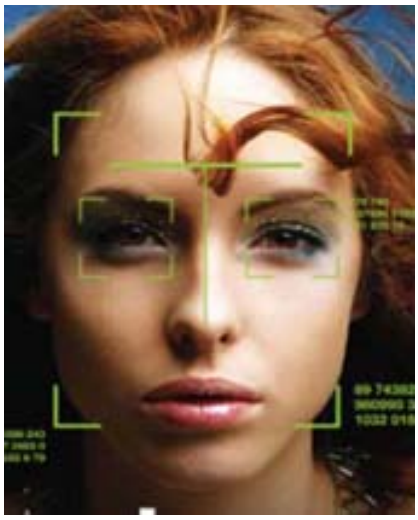
## TMP-Gate - Traveling documents authentication solution

TMP-Gate is a traveling documents authentication solution. It ensures that only the person granted his boarding pass will board the plane and not an impostor. TMP-Gate uses face recognition biometric solution to facilitate that.

**Features at a glance**

- Kiosk type, embedded solution for check in counters, security gates and boarding gates, as well as duty free shops and VIP lounges entrances.
- Using Bar-Coded Boarding Passes (BCBP), as specified by IATA 792 based on 2D barcodes (PDF417)
- Passenger's personal and flight information gathered from Bar-Coded Boarding Passes (BCBP)
- Non intrusive, User friendly interface
- Fast passenger's face acquisition, less than 1 second
- Fast passenger's verification, less than 1 second
- Easy to use by airlines', airport's and security personnel
- Fast installation
- Efficient user positioning engine ensures almost 100% identification accuracy
- Complements the boarding verification process at the gate.
- Verification attained by implementing sophisticated mathematical imaging face feature detection and matching.
- The system provides full management of traveling documents versus enrolled persons in a fully hierarchical fashion
- Web based administration, database of transactions logging and access
- Built in database server for reporting and data export
- Master / chain configuration to synchronize multiple ID stations
- Stand alone or networked configuration
- Secured and easy enrollment, encrypted database
- Scalable to any number of flights, up to 500 passengers per flight
- Covers passenger's height 1.40m – 2.00m
- Usability: 99.98%
- False Acceptance Rate: 0.01%
- False Rejection Rate: 2%
- Operation temperature: -5°C to 50°C
- Operation humidity: 10% to 90%

## TMP-Entry - Biometrical Facial Recognition



TMP-entry is an innovative and advanced biometric solution that uses individual's face as a key to grant access of use to premises which needs to be secured against unauthorized individuals.

The ability to permit or deny the use of a particular resource by a particular entity is based exclusively on positive authentication of the individual.

**FEATURES AT A GLANCE**

- Stand alone or networked authentication and enrollment terminals Non Intrusive, user friendly interface Easy to use
- Interactive verification features Fast installation Enrollment quality indication
- Embedded anti-counterfeiting mechanism; can't enroll or match from pictures, only people
- Insensitive to beard, scull hair or prescription glasses
- Fast single frame Enroll under-random lighting conditions in less than 1 sec
- Ability to enroll using RFID (including Mifare), numeric keypad, barcode and debit/credit cards
- Fastest match process under an extremely large dynamic light conditions including asymmetric including asymmetric
- Up to 0.01% False Acceptance Rate, covering skin texture from milky white to deep black
- Up to 2% False Rejection Rate for the same skin texture dynamic range
- Operational in harsh operation conditions, indoor/outdoor, without performance degradation
- Learning system with aging compensation mechanism Comprehensive reporting system with image sort and track mechanisms Person verification speed in less than 0.5 sec /person Covers applicant height 1.40m - 2.15m
- Verification attained by implementing a sophisticated fusion of image mathematical tools using 3D to 2D matching transformations algorithms
- Interfaces: Ethernet, Weigand
- I/O: Dry-Contact
- Web based administration with Encrypted database of transactions logging and access
- The system provides full management of enrolled persons using a comprehensive reporting system with image sort and track mechanisms
- Database server for reporting / data export
- Master / chain to synchronize multiple ID stations
- Easy integration with access control/time attendance systems

| | |
|---|---|
| | • Easy integration with access control controllers using standard protocols<br>• Capacity: scalable to any number of users, up to 100 users group profiles<br>• Operation temperature: -5°C to 50°C<br>• Operation humidity: 10% to 90% |
| | |
| **TMP-Protector - Fence Mounted Perimeter Intruder Detection System**<br> <br> | • *Microphonic Audio Verification System as Standard*<br>• *Dual Channel Processing which contributes to Low Nuisance Alarms*<br>• *Patented Alpha Sensor Technology*<br>• *Unique 'Performance Pledge' Guarantee*<br>Perimeter security is an effective deterrent to intruders with metal fences being the most common form of physical barrier. The most determined intruder can, however, defeat most types of physical barrier, usually by cutting through or climbing over the barrier.<br>Many electronic security systems focus on detecting intruders after they have entered the property. Often, this results in police or security personnel being alerted too late to prevent the intruder achieving their objectives. Intruders have learnt to make the most of the time delay between entering a property and the arrival of security personnel or police.<br>A well designed perimeter intrusion detection system, in which the detection technology is well matched to the physical barrier surrounding the site will not only provide reliable detection of intrusion attempts, but will offer the earliest possible warning of an attempt to enter the site illicitly.<br>The latest version of TMP-Protector, provides the capability to effectively combine the advantages of it's proven Alpha sensor cable technology with the physical delay factor and vibration transmission characteristics of the perimeter fence structure.<br>***Maximum Security***<br>• Simultaneous multi-channel digital signal processing enables "no compromise" detection of varied attack scenarios while maintaining a very low false alarm rate.<br>• Alpha sensor technology enables reliable detection of micro-impacts generated as a result of sophisticated attack styles.<br>• Digital detection processes simplify user setup and commissioning while maintaining extremely high system performance.<br>• System performance, defined in terms of high probability of detection while maintaining a very low false alarm rate is backed by the TMPProtector Performance Pledge.<br>• Simple interfacing to external equipment via volt free relay contacts, open collector outputs, and RS485 communications loop. Audio output provided as standard.<br>• Self test capability and comprehensive LED visual indication of system status. |

## FORENSICS SYSTEMS

### Digital Interview Recorder 3 CH/PAL

**Portable**
The TMP-PIR Interview Recorder system is believed to be the most portable and durable of its kind in the world. Built into a rugged briefcase-sized Pelican Case and supplied with a second identical case packing cameras, tripods and power supply, it is easily carried by one person.
**Reliability**
TMP-PIR restarts automatically on power loss, informs the user of any faulty media, and prompts to re-archive an interview upon completion should a disk fail.
**Robust**
Pelican Cases have a leading international reputation for rugged equipment transit, and the contents of the recorder are securely shock-mounted to the case walls.
**Uncomplicated Operation**
TMP-PIR is managed via three buttons. A start and stop button control the interview and a third button offers an Operator Control menu, from which you can test the recordable media to make sure each disc is blank and ready to record, and check the position of the cameras.
**Evidentially Viable**
Unique to Interview Recorders the TMP-PIR ensures your recordings are digitally signed as they are recorded, with your own unique key.
This means that at any time in the future it is possible to prove absolutely that a particular recording is complete, unchanged and originated on your recorder.
**Total Coverage**
The TMP-PIR leaves nothing to ambiguity. The own fully configurable Picture-in-Picture hardware gives a full screen view of the interviewee as well as two picture-in-picture shots to use as you wish, most often one will show the entire interview area through a wide-angle lens camera, and the other a close-up of the interviewer or interpreter.

### TMP-Light Portable 2 Drive Digital Audio Interview Recorder

The TMP-Light portable Interview recorder is a PACE compliant digital audio recorder for evidential and disciplinary interviews. The portable recorder can be mains or battery powered and is suitable for recording in any location. The recorder guarantees faultless, digital stereo recordings of up to eight hours on two identical CD's copies. Both copies are digitally signed preserving the integrity of the recording. The AIRLight recorder is network-ready.
**Disc Drives**
Physical Disc Format: CD-R.
On-Disc Formats: CD-DA (Red Book)
MPEG-1 Layer II (mp2)@192kbps
MPEG-1 Layer III (mp3)@192kbps
Speex (ogg)@24-70kbps
Number of drives: 2
Finalising Times:
Up to 2 mins (for 2 hour recording)
**Audio Inputs**
Freq. Response:
50Hz - 12kHz (-3dB)
Input Impedance: 600Ω
Input Sensitivity: 10mV@1kHz
Crosstalk: >60dB typical.
Digitized: 2 channels@48kHz
Phantom Power for professional microphones System

### Video-Postprocessing and forensic Video Analysis

**Videobox**
- CCTV Video Demultiplexing
- Support for all major multiplexers
- Live demultiplexing with Time & Date
- Live video enhancement
- PAL & NTSC support
- Comprehensive digital solution
- View station
- Digital video architect
- Video Database & capture system
- Video recording management

### SIM Mobile Phone Forensics System

**Mobile phone Analyser – Field**
SIM Mobile phone forensics System does not only provide the capability to recover evidence or intelligence from mobile phone handsets, SIM cards and media cards but can do it without leaving a trace.

The inconspicuous design of the System, quiet operation and display options

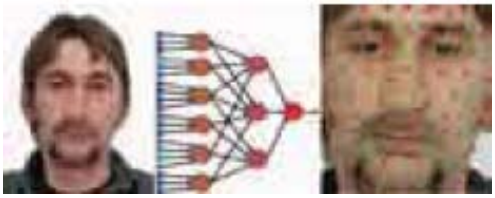
(standard daylight mode and „dark“ operation mode for use in low light covert situations) are synonymous with the requirement of covert operations.

**System key benefits:**

- Simple to use touch screen technology which is ideal for high pressure situations.
- High level of security with all stored data being encrypted and requiring smartcard and PIN login to access it.
- Ideal for covert situations as minimal trace is left on the mobile phone that has been examined.
- Clear on-screen guidance given toindicate how phones should be connected. Where software download agent is required this is loaded on to a supplied memory card to avoid contaminating evidence.
- Ability to optimise acquisition time by selecting only essential data to read. Time remaining to complete acquisition is displayed during downloads.
- Backing up of data so that if the examination is terminated unexpectedly the data already acquired is not lost.
- A completely portable and robust toolkit with an interchangeable, long-lasting, rechargeable battery.

## DATA ANALYSIS SECURITY CONTROL

### TMP FACE RECOGNITION



Face recognition technology is the least intrusive and fastest biometric technology. It works with the most obvious individual identifier – the human face. Instead of requiring people to place their hand on a reader or precisely position their eye in front of a scanner, face recognition systems unobtrusively take pictures of people‘s faces as they enter a defined area.
There is no intrusion or delay, and in most cases the subjects are entirely unaware of the process. They do not feel „under surveillance“ or that their privacy has been invaded.

**Technology**

The technology is based on neural computing and combines the advantages of elastic and neural networks.
Neural computing provides technical information processing methods that are similar to the way information is processed in biological systems, such as the human brain. They share some key strengths, like robustness, errorresilience and the ability to learn from examples.
Elastic networks can compare facial landmarks even if images are not identical, as is practically always the case in real-world situations. Neural networks can learn to recognize similarities through pattern recognition.

**The ideal solution!**

All of this makes face recognition ideal for high traffic areas open to the general public, such as:

- Airports and railway stations
- Casinos
- Cashpoints
- Stadiums
- Public transportation
- Financial institutions
- Government offices
- Businesses of all kinds

### IRTA - INTELLIGENT VIDEO SURVEILLANCE SOFTWARE

Figure 2

**IRTA**, is a **intelligent video surveillance software** that (i) records multiple video streams and allows remote live viewing, (ii) performs intelligent real-time analysis of incoming data, (iii) automatically takes action as required, and (iv) provides advanced video retrieval and management capabilities.

**Video Recording and Remote Live Viewing**

IRTA 2005 offers advanced video recording capabilities in both analog and IP/network camera environments. With the ability to record multiple video streams at rates of up to 30 frames per second, IRTA scales from one to thousands of cameras in increments of a single camera. Frame rates and storage capacity can be increased “on the fly” by simply adding additional COTS equipment to an existing infrastructure. Other video recording and viewing features include simultaneous viewing of live and recorded events, multicamera view capabilities (see Figure 1), integrated and automated pan-tilt zoom (PTZ) camera control, remote viewing, “oneclick” access to multiple site maps and cameras, among others. IRTA is also Multilanguage capable.

**Intelligent Real-Time Analysis**

Through its use of computer vision technology, IRTA performs intelligent real-time analysis on incoming video data. When events occur, IRTA will track a moving object, classify the object(s) of interest, interpret what the object is doing and determine if the event has breached a customer-defined policy. IRTA outperforms video motion detection (“VMD”) technology, which is known to report an inordinate amount of false alarms caused by snow, rain, wind, shadows, light changes, and the like. IRTA is designed to differentiate between relevant foreground activity and

changes in the scene caused by environmental conditions. Customer experience illustrates that IRTA reduces the number of false alarms over conventional VMD technology by up to 95%.

## OMR – OPERATIVE MOBILE ROOM FOR NEGOTIATION

OMR is meant to facilitate the managing of all those hazardous operations in which is required, two mobile computers and a PDA operable through a long range wireless encrypted network system. The agents, disposed in strategic points on the operation location, will be then able to share the all the information crucial for the activity progress.

In addition to the system are also integrated managing software to facilitate the operation of the staff:

- Software of voice transcription (TekSpeech): will not be required the direct and continuous intervention by the operator for all the transcription operations of the voice communication (ex.in case of negotiation) because will be authomatically managed by the system OMR.
- Instant messaging system: to allow a quick communication among the various workspaces. Infrastructure

**MR is composed of 4 modules:**

- **Central module** - A PC with server functionalities in which are centralized all the information to distribute to the several customers.
- **Control module** - It is where all the information are managed and monitored, equipped with projector, allows a convenient operation management.
- **Negotiation module** - A unit provided with a specific software interface made ad hoc for the operator who, equipped with microphone, will attend to the dictation of the operation relevant information. The software will convert the voice data in text and make them available, in vision, to the Control module.
- **PDA module** - Possibility to capture video to share them with the other clients or reply the functions of the Negotiation module interacting through a Bluetooth headphone.

## PHOTO & VIDEO IMEDIATE RESEARCH THROUGH METADATA STORING SYSTEM

**Hypercast Editor**, a software solution for segmenting, indexing, annotating, and cataloging all types of audio and video files, is the primary tool in the range for building a Media Asset Management system.

**Video capture**

The Hypercast Editor user interface is designed to provide fast and accurate control without requiring any special knowledge. You can play back all types of audio and video documents either locally, over a network, from a tape deck, or from an audiovisual database.

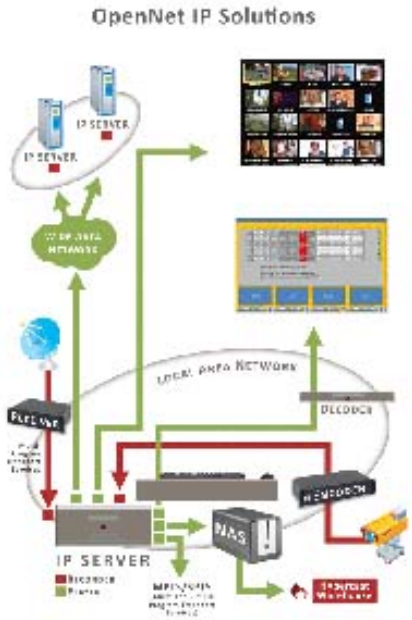
- Customizable blocks.
- Automatically saves work in progress and reopens the last saved version if work is interrupted.
- Identical processing of all files (video and audio).
- Batch digitization.
- Controls VCRs via RS-422 and DV.

**Encoding**

Hypercast Editor transcodes all types of audiovisual sources.

- Segment by segment encoding capability for a detailed selection of the information to be broadcast.
- Video encoding formats:Windows Media, Real, Quicktime, MPEG 1, MPEG 2, MPEG 4, .AVI, etc.
- Audio tape encoding formats: .WAV, .MP3, AIFF,AAC, etc.

**Hypercast Warehouse** is a flexible platform entirely dedicated to Media Asset Management.This full-featured software solution provides companies with a system for centralizing, sharing, and viewing audio, image, and video archives, and broadcasting them across multiple distribution channels (Web portals, mobile devices, ADSL, etc.). Hypercast Warehouse is very flexible and adaptable, designed for any company needing to manage content.




**Managing audiovisual files and their associated media**
Hypercast Warehouse references all types of objects, files, and physical media (audio, video, and still images).

- Identify all copies of a given video or image, whatever the version, format, or location.
- Automatically convert source files into various formats for viewing and distribution.
- Transfer the various copies to centralized storage locations.

**Managing associated data**
You can describe collections of images, videos, and images in a catalog.

**U-Share** is a network management system for content contribution or occasional broadcasts, automating the exchange of video and audio data from a source site to one or several destination sites. Designed for broadcasters and/or Telecom operators, U-Share is a software package designed in a modular fashion. U-Share uses the latest transmission technologies: the computer transport network IP (in asynchronous mode: FTP) and/or video (DVB Digital Video Broadcast in synchronous mode).The user-friendly interface of the U-Share system workstations ensures fast and efficient handling by users.

**Acquisition**
The U-Share video acquisition module automatically digitizes all types of feeds. U-Share remote- controls the various channel equipments (coder, decoder, VTR, server, grid, time code generator, and so on).

- Automatic scheduled or immediate feed acquisition.
- Digitization from VTR, an SDI source or ASI source.
- Video server control.
- Integrated simple video editing tool (Clean Cutter).

**Scheduling**
U-Share's exchange scheduling module allows the scheduling (Booker) of each exchange from a site to one or more receiving sites (source site, destination sites, start date/time, duration, and so on).

**Café** is a fully automated software solution for managing the entire video acquisition chain, from triggering recording via image recognition or according to a predefined program schedule, to file encoding and transmission to remote servers (Internet,Archives, intranet, etc.)

**Image recognition and scheduling**
Café features a scheduling module used prior to the acquisition process. Technicians define the settings for each recording session, such as the station name, date, time, etc. so they can schedule recordings several weeks ahead. They can also choose to trigger recordings via key image recognition. In this case, the technician saves an image and digitizing will start when that image (or part of it) is detected in the video stream, in real time. Likewise, recording can be stopped when another image is detected, such as a fixed image, a logo, etc.

- Scheduling over several weeks
- Detection of from 1 to 5 key images to start and stop recording
- Partial detection within an image
- Detection delay: 1 image (or 40 ms at 25 images/second)
- Digitizing delay: 400 ms
- Remote control

**Video Capture**
Café automatically handles all recording requests in order to enable 24/7 video capture. It controls external video capture tools and digitizes features. The program accepts a wide range of video sources (analog and SDI).

- Automatic generation of audio and video files by feature
- Video capture in AVI format (with or without compression)
- 24/7 operation
- Capture of broadcast streams or analog cassettes
- Management of changes in the program schedule

**IP recorder and IP Player**
• IP Recorder and IP Player are the same soft which can be use in two functions
• IP Recorder :
– Extract video from IP Stream on a network
– IP feed can be Unicast or Multicast
• IP Player :
– Play video over an IP network
– IP feed can be Unicast or Multicast

**Quality**

- Never alter the file (ex: after 12 cycles, the video file is exactly the same than the original)

**Cost effective**

- No need video grid
- No need video pure server
- No need hardware decoder
- Simple workstation

| | |
|---|---|
| | • Video mosaic in a « simple » PC<br>**Best system to exchange video to many other stations**<br>• More powerfull than FTP exchange system<br>• It takes 20min to exchange 20min video whatever the number of destination<br>**Time**<br>• The best way to exchange one video to many destination in the same time. It costs only the time of the media, in opposite for FTP many users. |
| | |
| **WORKSTATION M5 - Digital forensics lab**<br> | **Compact Digital Forensics Lab - Network and System Forensics**<br><br>**Collection.** Data is identified, labeled, recorded and acquired from all of the possible sources of relevant data, using procedures that preserve the integrity of the data. Data should be collected in a timely manner to avoid the loss of dynamic data, such as a list of current network connections, and the data collected in cell phones, PDAs, and other battery-powered devices.<br><br>**Examination.** The data that is collected should be examined using a combination of automated and manual methods to assess and extract data of particular interest for the specific situation, while preserving the integrity of the data.<br><br>**Analysis.** The results of the examination should be analyzed, using well-documented methods and techniques, to derive useful information that addresses the questions that were the impetus for the collection and examination.<br><br>**Reporting**. The results of the analysis should be reported.<br>Items to be reported may include: a description of the actions employed; an explanation of how tools and procedures were selected. |
| | |
| **SYS-DOCU- INFORMATION SYSTEM FOR FALSE AND AUTHENTIC DOCUMENTS**<br> | The system provides support for the capturing and verification of identity documents authenticity (passports, identity cards, driving license, VISA documents, residence permits) and of suspected currencies.<br>Currently used in the main ports and airports areas of southern Italy, the system is addressed to all the institutions , governmental or else, which require verification of documents validity.<br><br>It allows to query and entry into a database, images and descriptions of safety characteristics of various National and International documents, as well as integrating database of pre-existing specimen.<br>It also offers the opportunity to file false documents, thereby providing a further database of reference for the attempted forging. |
| | |
| **Sdsr: Psychophysics analysis system for interrogation**<br> | **The LVA 6.50 provides the ultimate investigation focus tool for homeland security, intelligence, military and law enforcement use.**<br>LVA 6.50 is a security-level advanced voice analysis solution providing instant truth verification, threat assessment, and emotion identification. LVA 6.50 analyzes voice samples in real-time to provide timely and reliable results for quick and effective decision-making. LVA technology was designed specifically for security, law-enforcement and multi-purpose intelligence use, and is available in three different usage modes:<br>• Online Mode - Enables users to tailor their investigation questions in real-time, allowing them to pursue leads discovered during the test itself.<br>• Offline Mode - Provides in-depth analysis of pre-recorded conversations.<br>• Investigation Mode - Uses a polygraph-like questionnaire and methodology to quickly get to the facts.<br>**LVA works with any spoken language - analyzing not "what" is being said, but "how."**<br>**LVA 6.50**<br>The security arena is routinely challenged by new types of threats, more sophisticated criminal activity and more advanced sources of investigation data. The need to identify harmful intentions and crime suspects coupled with the need to differentiate between relevant and insignificant information is crucial for success. With the ability to detect and measure a wide spectrum of emotions and cognitive processes in real-time and/or offline, LVA 6.50 provides a critical edge. |
| | |

## Suspect Detection System

The **TMP-SDS** core technology is based on proprietary software; it is an "expert system" that emulates an investigator's Modus Operandi (MO) by incorporating artificial intelligence techniques and algorithms. All hardware elements are best-of-breed off-the-shelf third-party components. The technical solution is comprised of a front-end, the 'Test Station', and a back-office where multiple-station and multiple-site data is stored, managed and distributed.

**"TMP-SDS"** is a fully automated system not requiring human control and/or operation.

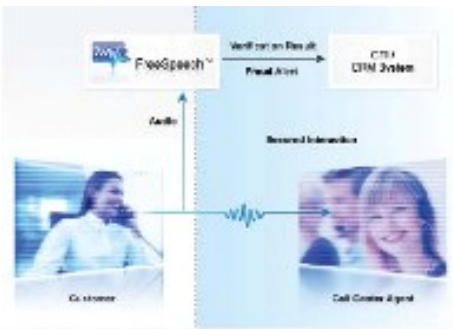
All of the TMP-SDS products are an all in one unit which includes BIOMETRIC and Documentation Verification features in addition to the interrogation capabilities. The TMP-SDS technology enables conducting hundred of interrogations without help of professional interrogator interviewers. In 5 minutes test the system can identify terrorists, employees who has hostile intents, criminals, smugglers or collaborators and direct further interrogation. The operation of the system is simple and requires only 2 hours training of any soldier with basic computer knowledge.

The **TMP-SDS 1002** Test Station serves as the point-of-contact with the individual being examined. The Test Station features an ergonomic design and is adapted to the environmental conditions (limited space, necessity to queue, strong background nois etc.) common to border control points.

The **TMP-SDS 1003** is an "Internal Threat" prevention and detection system which was developed for pre employment and repetitive employees screening. It is also fully automated system and require no involvement of professional interrogators or interviewers.

The **TMP-SDS 4M** is a military grade Rapid Intelligence Interrogation Solution. This new mobile system is already being used by intelligence units in Israel. The system enable military units to efficiently interrogate hostile or indifferent civil population. Using the TMP-SDS 4M will enable military unit which might have no knowledge of the local spoken language to identify who among the civilian is a wanted terrorist, where there might be nearby ambush or mine trap and above all – save lives.

## FreeSpeech - Biometric speaker verification system




Independent of conversation content, the language spoken and accent, FreeSpeech transparently verifies customers within seconds. Enrollments take place in the background of natural conversations between the customer and contact center agent. By eliminating cumbersome authentication processes, FreeSpeech enhances the customer experience, reducing call duration and associated costs, and allows agents to focus on providing quality service. FreeSpeech 6.5 enables real-time operational and transactional risk management by biometrically analyzing callers' voices. Fraudsters watch lists can be used to identify fraudulent activity.

***Main Features***

**ALGORITHMS**

- Language and accent independent
- Text independent
- State-of-the art accuracy
- Verification and identification capabilities
- Voiceprint quality assurance via consistency and DTMF/dial-tone detection
- Supervised and unsupervised voiceprint adaptation
- Multiple threshold/tuning settings

**INTERFACE**

- Simple and easy-to-use Web Service APIs enable secure, prompt and platform-independent integration
- Easy-to-use SDK
- Identity management via LDAP
- Application data - easily attached to any system entity (i.e., speaker, voiceprint)
- Authentication feedback capabilities - enabling controlled performance evaluations
- GUI embedded in Windows Explorer, enabling offline system operation using prerecorded audio files
- Scripting tool for management and performance evaluations

## Darim SM2000 - Broadcast and Security Monitoring solution for multi-channel video

Up-to-date broadcast monitoring and security control rooms require reliable multiple-image display systems that can be easily configured and controlled to meet the individual user's needs. Darim's SM2000 is a versatile solution that offers high-quality image processing and multiple-source displaying. The compact Multiviewer system provides users with effective and convenient usage of the monitor workspace to the maximum. Based on the highly scalable architecture consisting of a choice of various processing cards and their inputs, the system allows users combining various formats in one system. Multiple video sources are routed to a multiviewer and displayed on a single display. The Multiviewer system also provides users with excellent image quality, smooth zooming up to full screen.

**Features**

- Various video sources all in one system displayed in real time
- Displays up to 12 image windows on a single display
- Compatibility with most of IRDs, Video Servers, Encoders which provide IP stream output
- Unlimited display layouts can be created in 3D environment
- Innovative 3D representation of input streams with smooth zooming up to full screen
- Audio bar-graphs for easy audio control
- Real-time clock & date, per-channel stream statistics
- Archiving option is available for select channels

## TMP-CIT - Competitive Edge For Intelligence Software

TMP-Cit is an exceptional ontology-driven intelligence platform for single-point access approach to intelligence information management. It functions as a sophisticated intelligence software that points to and constantly seeks in-house and external information sources to systematically enrich the investigative process to support the organizational decision process with relevant and highly focused information.

**Features Summary:**

- Semantic Ontology
- Automatic Crawling
- Automatic Gathering
- Automatic Filtering
- Automatic Summarization
- Automatic Keywords & Phrases
- Extraction - Text Mining
- Automatic Meta Data Extraction
- Automatic Indexing
- Link Analysis
- Visualization
- Profiling
- Alerts & Inferences
- Reports
- Investigative Intelligence
- Management Portfolios (Trays)
- Search & Retrieval
- Publishing
- Collaboration
- Annotations
- Document Knowledge Card (KCard)
- Tagging
- Automatic Categorization to
- Topic Tree
- Clustering
- Documents Network Generation

## Administrative Management Software for Police Commando Units

**Record** is the new software which allows to streamline and conduct a management audit on some burocratic and frontoffice activities ,now in charge at the local Police commando.

Its features allow for the monitoring of notification activities, documents viewing, investigations, and , not least , the retrieval of documents, plates etc.objects for which there are SDI records.

The system allows for the above descrive activities optimization, by verifying in real time the service efficiency by streamlining all the micro-activities, within the service, which waste sourches spendible in defferent activities.

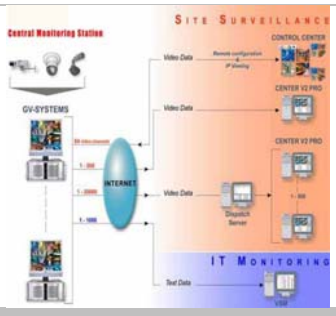
Particular benefits are obtained in the data collecting phase (Research) and during the whole phase of formal communication to other organizations.

- Discovery
- Notification
- Verifications
- Documents viewing
- Research, statistical surveys, integrations.

## CMS – Centralization solution for CCTV

**Why GV-CMS?**

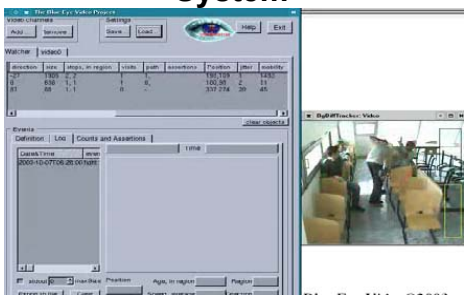
- A cost effective solution
- 8 years consolidated Research experience
- Reputation with many reference sites in over100 countries
- Efficient technical support
- **What can GV-CMS do for you?**
- Powerful centralized management of multiple remote sites
- Receives and records videos for evidence
- Reduce false alarms




**CMS**

- Control Center
- Center V2 Pro
- Dispatch Server
- Vital Sign Monitor (VSM

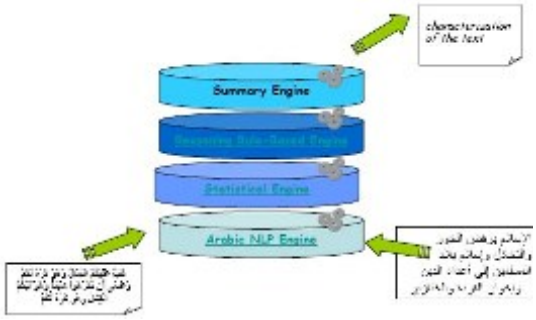
## Urban Surveillance – Beahavioural System



**Features**

- Pedestrians localization and behaviour
- Language and behaviour description
- Images and videos recording
- Event recording
- HW and SW synchronization
- Local / distance piloting
- Blue Link Protocol
- Parking monitoring
- Urban areas surveillance
- Outlets monitoring
- Access control
- Airports surveillance
- TOTAL SURVEILLANCE
- COSTS LOWERING
- COUNTER-TERRORISM
- FIGHT ANGAINST CRIME

## White Paper - Intuitive Summarization – The Way Out of the Information Glut




The purpose of TMP-Scan is not mere "categorization" but generation of an intelligence summary of documents or batches of documents. This summary includes:

- Characterization and prioritization of the document.
- Analyses of the significance of religious terms with terrorist ramifications.
- Identification of known persons, organizations and groups which appear in the document., including relevant information on those entities.
- Phone numbers, addresses and place references.
- Information implicit in the document and deduced from explicit concepts.

TMP-Scan currently analyses documents with Islamic content, however future modules will be able to deal with additional domains. TMP-Scan supports various digital input formats as well as hard copies, which first must be scanned and processed by an external OCR (Optical Character Recognition) software. The TMPScan technology has succeeded in reducing the processing time of a single document, so a document of tens of pages is currently processed and summarized within seconds. The processing time varies according to the capability of the computer that TMP-Scan runs on.

## SIM-Nexus - Sensor Command and Control System

Network architecture that allows multiple users to monitor and adjust multiple sensors throughout a security network.

***Legacy Connectivity:***
SIM-Nexus' open architecture allows you to attach and control other devices to the network. These devices include legacy serial ports, analog video, TASS and Pelco-D.

***SIM-Nexus Console:***
The SIM-Nexus Console, which runs on Windows (XP or 2000), is an application that gives users a common means of controlling any camera or group of sensors.

## DRUG USE CONTROL

## Salivascreen IV - Certified test for the detection of multiple drugs

A rapid screening test for the simultaneous, qualitative detection of multiple drugs, parents and metabolites, in human oral fluid. For professional in vitro diagnostic use only.

**INTENDED USE**

The SalivaScreen VI is a lateral flow chromatographic immunoassay for the qualitative detection of Amphetamines, Cocaine, Marijuana, Methamphetamines, Opiates and Methadone and their metabolites in oral fluid at the following cut-off

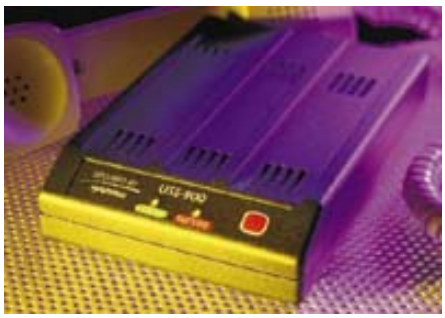
concentrations.
The SalivaScreen VI will detect other related compounds, too: **AMP, THC, MET, OPI, MTD.**
The SalivaScreen VI provides only a preliminary analytical test result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) and gas chromatography/tandem mass spectrometry (GC/MS/MS) are the preferred confirmatory methods. Professional judgement should be applied to any drug of abuse test result, particularly when preliminary positive results are indicated.

## CRYPTO SYSTEMS

### SECURE LOCK
**SECURITY PHONES**

**How Secure Lock Works**
Whenever a user needs to make a secure call, or secure text communication, he or she simply presses and holds the C button in the keyboard to initiate a fully-encrypted session. The call switches back to standard clear mode when the call is finished.
Although a simple process for the user to enjoy, the technology behind Secure Lock is quite impressive.
Whenever a secure session is initiated, our software kicks in to encrypt the voice or text data using a constantly changing mathematical formula which creates a 1024 bit asymmetric key based on the RSA algorithm, as well as a changing session key which replaces the encryption every second!
Not only is the Secure Lock encryption software the perfect choice for politicians, lawyers, police and governmental agencies, executives, and anyone else who recognizes the need to prevent confidential information from falling into the wrong hands, but the encryption algorithms we use are so secure that our software has been licensed by the Israeli Ministry of Defense.
**Secure Lock and RSA – Impenetrable Protection**
While cryptology experts have cracked the RSA 56-bit and 64-bit keys long ago, no one has been able to crack the 128-bit key since a world-wide distributed computing effort began on 3 December 2002.

### USS-900 Narrowband Voice, Fax and Data Security Features



- Secure voice communication when connected to virtually any analog telephone.
- Secure fax communication when connected to any G3 fax machine.
- Create secure e-mail attachments ensuring safe confidential communications.
- Secure point-to-point data transfers when connected to computers.
- Secure any accessible computer file for safe storage and transportation.
- Compact, portable and very easy to operate.

When connected to regular telephones or fax machines the Patented (U.S. Patent S6,430,691) USS-900 provides high-grade voice, fax and data encryption. When connected to a computer the USS-900 can secure e-mail attachments, provide point-to-point data transfer capabilities, and can encrypt any accessible computer file. The USS-900 is so flexible, diverse, portable and easy to use why would anyone allow their personal and private communications to be sent over telephone lines or stored on a computer unprotected. In this day and age, government, business and personal communications need to be kept confidential, encrypted information can not be decrypted and read by an unauthorized person. The USS-900 contains the communication technology and utilizes the ultimate digital encryption algorithm of the day the CitadelTM CCX. The device is a compact and portable security system that is very easy to operate.

### ULP-1 - Ultimate Laptop Privacy

Ultimate Laptop Privacy ULP-1, is a breakthrough, high-grade, easy-to-use hardware based encryption solution. Simply plug it into notebook computers via the use of a PCMCIA card. This new product protects the integrity of your computer by ensuring that your private and confidential information stay that way.
**Features:**
E-Mail and Computer File Encryption with Access Control and Microsoft Word/Excel Add-in

- Secure e-mail attachments ensuring safe, confidential communications.
- Secure any computer file when using Windows® 98, 2000, Me or XP.
- Prevent access to your computer by removing your ULP-1 card.
- Automatic encryption of Microsoft Word and Excel 2000/2002 files.
- Stop the spread of unwanted and potentially damaging computer viruses, when utilizing Microsoft Outlook 2000/2002.
- Destroy confidential information; easily wipe files permanently.
- Automatic key management system utilizing a complete hardware based encryption solution.

## Spider - digital voice and data encryption terminal

**Spider - Top security level digital voice and data encryption terminal with special features.**

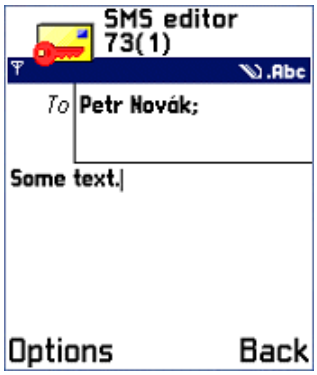
**Use:**

- Protection of confidential phone calls and data transfers - encrypted data, fax and voice transmission.
- Identification of approved users by chip cards.
- Communication on leased lines, in ISDN and GSM networks.
- Several levels of protection.
- Online help for the user.
- User-friendly interface of the managing software.
- Possible development of an encrypted answering machine function.
- Possible development of an Internet environment support (TCP/IP).

**Description:**

FIELDMARSHAL brings a complex solution in the field of communication security. The request for it gains in importance with the world-wide spread of Internet when even telecommunication providers are not able to define precisely, in what communication path a particular conversation is transferred.
Spider project represents a combination of the latest technology and modern approaches.

## Spider SMS - Sending and reception of encrypted SMS




**Description**

- Software application for mobile phones
- Sending and reception of encrypted SMS
- Top security level
- No need to modify hardware, just install SW
- Encrypted messages are safer than voice
- Standard SMS, no need for data service
- Secure encrypted contacts database
- Separate PIN protected application access
- Support for long messages up to 300 chars

**Easy operation**

- User friendly application, very easy to use
- All operations are similar to operations used in default messaging applications installed in the respective mobile phone
- No influence of the application on original phone functions

**Security**

- Top security level
- Latest cryptographic technologies used
- All processes defined by famous Dr. Klima
- Uses strong algorithms – AES256 and SHA256
- Built-in top quality random key generator
- International certification is possible
-

## SILENCE
## Miniature portable dual-band GSM signal detector with various alarms.

Ever increasing prevalence of cellular phones today causes less desired ethical and technical situations in places where use of mobile phones is not desirable.
But is there a feasible way to regulate the use of portable phones? In many cases relying only upon the cooperation of mobile-phone users does not prove to be too satisfactory and sometimes it is even necessary to prevent the very possibility of unauthorised mobile communication in the respective place. Perfect devices for such purposes are the "Silence" cellular phone detectors.
These new innovative detectors have been developed to guide cellular phone use e.g. in conference rooms, aeroplanes, hospitals, computer rooms and theatres.
The surface-mounted, miniaturised construction provides variety of applications, ranging from a fixed wallmounted to a portable device. Optional directed antenna is available for limiting the monitored area.
The Silence GSM detector family provides wide variety of alarm signalling: remote or built-in LED indicator and sound alarm, pre-recorded warning message, electric contact for centralised security systems and miniature vibrator, as well. A unique, combined analogue and digital filtering method is used for achieving a high level sensitivity with minimal false alarm rate. Adjustable sensitivity helps with fine regulation of the monitored area. The "Silence" GSM-phone detector reacts to the cellular phone's transmission to contact the base station during initialising or receiving calls and regular updating of service data as long as the phone power is switched on. From reduced distance the detector is able to alarm the talks started out of the monitored area.

**Technical Specifications:**

**Operating Band:** 900/1800 MHz GSM

**Operating Range:**

-up to 30 m for incoming or outgoing calls, depending on type of antenna
-min. 2 m for continuous transmission, depending on output power of the cellular phone

**Battery Type:** 6LR61 9V Battery

**Size (H×W×D):** 95×60×23 mm

| | |
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| | **Weight:** 0.11 kg (incl. battery)<br>**No radiating radio frequency oscillators inside.** |
| | |
| **CRYPTOPHONE T3 3rd Generation - Fully Digital - Secure Terminal**<br> | **CRYPTOPHONE T3** is the latest evolution of the well-proven Secure Terminal concept. Flexibility and innovation are the key words for this new paradigm in information security.<br>Shaped in a stylish aluminium case, it integrates sophisticated security and communication functions for operation over almost any available communication channel.<br>Based on a modular design concept, CRYPTOPHONE T3 is configurable to meet Customer requirements at the best. The intuitive user interface, very similar to the most diffused mobile phones, it reflects the full potential of the system.<br>The digital encryption algorithm guarantees a mathematically verifiable high security level. Voice quality in crypto is practically the same as in clear. In case of poor lines a fall-back to lower speed communication is automatic.<br>Secure voice communication can be activated either manually, with a single push of a button, or automatically without the need of user intervention at all.<br>A flexible management structure assures the distribution of keys either on-line, via the communication channel, or off-line with the use of tokens or even manually from the keypad.<br>Interoperability with voice and fax encryption equipment, the Cryptophone 7000 and Allfax 3000, makes CRYPTOPHONE T3 easy to integrate in existing networks.<br>CRYPTOPHONE T3 was designed to keep compromizing emissions as low as military standards require. Excellent figures of MTBF and MTTR confirm the reliability and the ease of maintenance of the equipment.<br>**CRYPTOLOGY AND SECURITY**<br>Encryption Process:<br>• non linear stream cipher proprietary algorithm<br>• custom algorithms available on request<br>**Keys:**<br>• 3-key hierarchy: system key, communication (user) keys, message key or as per algorithm definition<br>Physical Random Number Generator<br>• according to FIPS PUB 140-2 |
| | |
| **CRYPTOPHONE T3 IP Voice over IP - Secure Terminal**<br> | **CRYPTOPHONE T3 IP** is the latest evolution of the well-proven Secure Terminal concept. Flexibility and innovation are the key words for this new paradigm in Information Security.<br>Shaped in a stylish aluminium case, it integrates sophisticated security and communication functions for operation over IP networks.<br>Based on a modular design concept, CRYPTOPHONE T3 IP is configurable to meet Customer requirements at the best. The intuitive user ineterface, very similar to the most diffused mobile phones, reflects the full potential of the system. The digital encryption algorithm guarantees a mathematically verifiable high security level. Voice quality in crypto is the same as in clear.<br>Secure voice communication can be activated manually, by the push of a button, or automatically without the user intervention. A flexible management structure assures<br>**Encryption Process:**<br>• standard algorithm (AES 128, AES 256)<br>• stream cipher or block cipher proprietary algorithm<br>• custom algorithms available on demand<br><br>**Keys:**<br>• key lenght compliant with encryption algorithm specifications<br>• key hierarchy according to custom algorithms<br>PhysicalRandomNumberGenerator<br>• according to FIPS PUB 140-2<br><br>**IP telephone features:**<br>• voice activity detection<br>• silence suppression<br>• comfort noise generation<br>• error concealment<br>• calling features according to security policy |
| | |
| **TMP-CHO1c**<br>Digital encryption handset for HF-SSB and VHF/UHF | **The TCH01c – *TMP Crypto Handset*** – is a unique and sophisticated radio encryption unit, combining an encryption module, a vocoder and a modem in a single handset.<br>The equipment, suitable for mobile use and for base station tactical applications, takes advantage of the wide experience we gained with the TX series of equipment delivered in tens of thousands of units to military, and law enforcement.<br>Developed around the H250 handset, the TMP-CH01c incorporates all of the features (physical and acoustic) of the standard military handset currently used for tactical communications. High quality acoustic transducers with environmental |

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| | noise suppression enhance the performance of the TMP-CH01c making the secure handset highly reliable even for heavy duty.<br>The TCH01c is configurable for operation over HF-SSB and UHF/VHF standard or narrow spacing radio channels. Latest generation modems and vocoders have been designed to allow excellent voice quality also over bad channels. |
| | |
| **TMP-CXO1c**<br>DIGITAL ENCRYPTION FOR VHF/UHF RADIO<br> | ***TMP Crypto Module*** - is a unique and sophisticated fully digital radio encryption unit, combining encryption, vocoder and modem in a single module. The equipment, designed to be installed in both mobile and hand-held radio, takes advantage of the wide experience we gained with the TX series of equipment delivered in tens of thousands of units to military and law enforcement. TMP-CXOIc is designed to operate over VHF/UHF radio networks either with standard or reduced (12.5 kHz) channel spacing, in simplex or semi-duplex, with the ability to operate also over trunk networks including telephone line sections and microwave links. Latest generation modems and vocoders allow excellent voice quality even over bad channels.<br>Configurations, such as key management and key injection, are performed through the accessory connector of the radio, controlled by PC or PDA. ROAR - Radio On the Air Rekeying - key management technology is available to allow fast and reliable operation on the field. |
| | |
| **TMP-FAX 3000**<br>IN-LINE FACSIMILE ENCRYPTION<br> | **TMP-FAX 3000** is a new generation stand alone in-line fax encryption equipment. Designed to be the efficient and economical solution for secure fax messaging, TMP-FAX 3000 can operate with any Group 3 fax machine. The equipment is extremely easy to use making operation transparent to the user and encryption automatic. Connection to the fax machine is easily made by inserting TMP-FAX 3000 between the telephone line wall plug and the fax machine. This allows encryption of facsimile messages without the need of a fax machine equipped with a special interface.<br>The available encryption algorithms guarantee a verifiable high security level. Customised algorithms can be tailored according to customers' specific needs. The integrated smartcard reader/writer allows user identification, authentication and secure key storage. Other smartcard based applications can be developed according to customer's requirements.<br>TMP-FAX 3000 includes the latest generation fax modems for secure fax message transmission and reception up to 14400 bps. Transmission both in crypto and in clear fully complies with ITU-T G3 standards, including ECM error correction. Key input and unit configuration are controlled by a hierarchy of passwords. TMP-FAX 3000 keeps dangerous radiations as low as military standards require. Excellent figures of MTBF and MTTR confirm the equipment reliability and ease of maintenance. |
| | |
| **TMP-Com – Secure storage**<br> | **TMP-Com** is a secure storing solution, it is a secure device of low wheight and small size, which, if connected to any laptop through a USB port, ensures protection of data and applications into the ciphering device.<br>A strong authentication mechanism, operated by the device and based on the inserting of a security password, by a touchscreen keyboard, enhances protection against attempts of unauthorized access.<br>The embedded security processor operates up to 100Mbps and supports algorithms AES 256 and RSA 2048 types and provides the implementation of customized encryption algorithms. The encryption performed by the device **TMP-Com** is hardware type, thereby ensuring an unparalleled security level, compared to the software or smart-card based solutions.<br>Adequately accompanied by a virtualization software, the security device, whose use would be strictly dependant on external softwares, will be turned into a stand-alone working environment safe and mobile, on which the necessary standard applications and interfaces can be installed. |
| | |
| **TMP-Landline secure speech communication device** | The **TMP-Landline** device provides secure classified voice communication. **It** allows operating it both as a conventional telephone and as a secure device for classified/encrypted voice communication. It is built in Advanced ITS Panasonic KX-TS2363/TS2365 telephone. 256 bit encryption algorithm, developed under the former Soviet Union standard (GOST 28147-89), is used in **TMP-Landline.** The device is approved for use by state departments, ministries, law enforcement |

agencies, government contractors, banks, and commercial structures. By customer's request secure 256 bit GOST algorithm can be changed to the AES 256 bit algorithm.

## TMP-Mobile - privacy of cellular telephone conversations

Secure speech communication device is developed to achieve privacy of cellular telephone conversations (based on **HTS Smartphone Qtek 8500/Dopod S300**)
The **TMP-Mobile** device provides secure classified voice communication over GSM mobile networks (***data/fax mode must be available!***). **TMP-Mobile** allows operating it both as a conventional mobile smartphone (or communicator) for voice calls and as a secure device for classified voice communications ***through data/fax channel***. The **TMP-Mobile** device consists of a conventional HTC based smartphone/communicator (Qtek 8500), special software Rphone-SP (Rphone-PDA) and a secure SD, mini-SD or micro-SD card. **TMP-Mobile** is flexible, diverse, portable and easy to use. It prevents information theft from eavesdroppers trying to capture the conversation (or data transmission) sent over cellular GSM channels.
256 bit encryption algorithm, developed under the former Soviet Union standard (GOST 28147-89), is used in TMP-Mobile. The device is approved for use by state departments, ministres, law enforcement agencies, government contractors, banks and commercial structures. By customer's request secure 256 bit GOST algorithm can be changed to the AES 256 bit algorithm.

## TMP-Pouch - protect unauthorized activation and listening in your cellular phone

Is designed to protect unauthorized activation and listening in your cellular phone that can lead to disclosure of your private or business information.
**TMP-Pouch** (in the middle of the picture) has an appearance of an ordinary leather type pouch suited for the majority of mobile phones including Blackberry and iPhone. In reality, this innocently looking case is the most advanced means of safeguarding privacy. **TMP-Pouch** prevents secret recording and transmission of conversations via switched on mobile without owner's authorization. To keep your privacy put a mobile phone into a pouch and switch the latter on. From now on no secret recording or voice transmission via your mobile becomes possible.

## JAMMER – FREQUENCY INHIBITORS

### Audio Speaker Covert Jammer -

### VIRTUAL SCREEN GENERATOR FOR GSM, DCS, UMTS 900mhz - 1800mhz - 2100mhz

- Inhibition Standards: GSM 900, GSM 1800, DCS 1800, UMTS
- Frequencies bands: 900mhz - 1800mhz - 2100mhz
- Time inhibition mode: constant
- Modulation format: not impulsive
- Inibition maintaining capacity: continuative 24 h
- Triband output type: simultaneous
- Hanger-on emission delation: ³ 30db
- Harmonic emission delation : ³ 40db
- Intermodulation delation: ³ 20 db in band and ³ 30 db out of band
- Frequency stability: within 100khz
- Operating Temperature: from 0 to +50 °c
- Power tension: 220v ± 20%
- Power Consumption: 80W
- Dimensions: 90h x 28l x 30p cm
- Weigh: 15Kg

## Silence Guard - High power dual-band GSM signal jammer with intelligent jamming.

**Applications**
Acoustic Isolation:
The system provides the ultimate solution wherever cellular communications cause nuisance, either through loud ringing or loud conversations. S-Guard is the most suitable for executive offices, board rooms, conference centres, corporate headquarters, libraries, cinemas, religious places, concert halls, exclusive restaurants, educational institutions, etc.
**Breach of security policy:**
Cellular phones are innocent looking communication devices, but they enable continuous transmission of voice/data even in places, where such communication is prohibited. Mobile phones are so small that it's almost impossible to track a person conducting a conversation and spot such misuse.
**Accidental Eavesdropping:**
Many cellular phones dial the last number by simply hitting the SND key. In many instances, people press the SND key by mistake and thereby initiate a call unintentionally. Such incidents may lead to transmission of confidential information over the air.
**Intentional Eavesdropping:**
Cellular phones continuously communicate with cellular base stations over the signalling control channels. Various cellular protocols enable a skilled technician to remotely activate a specific cellular phone as a bugging device and listen to conversations in the vicinity of the cellular phone's microphone. S-Guard provides the ultimate solution to the above situations.

## SILENCE
## Miniature portable dual-band GSM signal detector with various alarms.

Ever increasing prevalence of cellular phones today causes less desired ethical and technical situations in places where use of mobile phones is not desirable.
But is there a feasible way to regulate the use of portable phones? In many cases relying only upon the cooperation of mobile-phone users does not prove to be too satisfactory and sometimes it is even necessary to prevent the very possibility of unauthorised mobile communication in the respective place. Perfect devices for such purposes are the "Silence" cellular phone detectors.
These new innovative detectors have been developed to guide cellular phone use e.g. in conference rooms, aeroplanes, hospitals, computer rooms and theatres.
The surface-mounted, miniaturised construction provides variety of applications, ranging from a fixed wallmounted to a portable device. Optional directed antenna is available for limiting the monitored area.
The Silence GSM detector family provides wide variety of alarm signalling: remote or built-in LED indicator and sound alarm, pre-recorded warning message, electric contact for centralised security systems and miniature vibrator, as well. A unique, combined analogue and digital filtering method is used for achieving a high level sensitivity with minimal false alarm rate. Adjustable sensitivity helps with fine regulation of the monitored area. The "Silence" GSM-phone detector reacts to the cellular phone's transmission to contact the base station during initialising or receiving calls and regular updating of service data as long as the phone power is switched on. From reduced distance the detector is able to alarm the talks started out of the monitored area.
**Technical Specifications:**
**Operating Band:** 900/1800 MHz GSM
**Operating Range:**
-up to 30 m for incoming or outgoing calls, depending on type of antenna
-min. 2 m for continuous transmission, depending on output power of the cellular phone
**Battery Type:** 6LR61 9V Battery
**Size (H×W×D):** 95×60×23 mm
**Weight:** 0.11 kg (incl. battery)
**No radiating radio frequency oscillators inside.**

## TMP-Smartshield System (GSM, 3G/ UMTS, CDMA)

Imagine you are in charge of the protection of a sensitive site (government building, hotel or conference center). Our **TMP-Smartshield System** provides you with a solution to effectively control all cellular mobile communication:
The system combines the following components:

- 3G/ UMTS Jammer
- SMARTSHIELD intelligent GSM VIP Jammer
- CDMA Jammer

With 3G/ UMTS and CDMA effectively jammed, GSM is the only remaining cellular communication channel.
And the detailed control of this channel is laid into your hands by our Smartshield intelligent GSM jammer.
**Smartshield** will effectively solve these tasks:
1. **Smartshield** can cover a large area with a low output power. If the covered diameter is 40 meters, a conventional jammer needs 1W when **Smartshield** only needs 2mW. In outdoor situation, a “stupid“ jammer may need 16-20W or more to cover a 60 meters diameter area when Smartshield needs 0.5W.
2. **Smartshield** can choose targets to shield. When **Smartshield** works, selected

mobile phone can communicate normally, but the others unauthorized subscribers are disconnected and cannot communicate (this will not show up on their phone display).

3. The inverse operation, blocking only selected individual phones, can be helpful too, e.g. during a hostage taking scenario.

## TMP-MK4
## GMC Yukon Denali 2009 & Mercedes-Benz S500L Jamming System

The TMP-Mk4 Extended GMC Yukon DENALI is a fourth generation of specially customized luxury vehicle, equipped with a fully integrated broad band jamming system.

A highly efficient special high power TMP-Mk4 Extended designed for protection of ground troops, bomb disposal squads and anti-terror security applications against the threat of remotely controlled improvised explosive devices (RCIEDs).

TheTMP-Mk4 Extended system covers continuously and simultaneously the most commonly used RF communication frequencies from 25MHz to 3800MHz which terrorists ae using to detonate road-side bombs (RCIEDs).

Using the latest jamming and antenna technology, the third generation of TMP-Mk4 Extended now has an ultra high RF transmitting power of 1650 watts (more than 4500 Watts of EIRP) resulting in more coverage distance.

This state-of-the-art RFjamming system is installed in the trunk of the vehicle and is supported by a fully integrated smart active cooling system, powered by a dedicated specially customized independent high power DC generator, high gain omni directional antennas are mounted on the roof of the vehicle.

Full system management (activation, control and operation) is carried out via a remote control unit which is installed (in a covert manner) inside the driver's console unit.

The customization includes special RF shielding for full protection of driver and passengers.
Optional armoring to level B6 is available for all our Military and VIP vehicles. There is simply no better way to defend your VIP from the threat of radio activated bombs.

**Advantages of the TMP-Mk4 Extended version:**

- Extended frequency range 25-3800MHz.
- Increased total RF output power up to 1650 Watt.
- Increased total EIRP power up to 4500 Watt.
- New more efficient jamming signal source.
- Independent very high power (7kW) DC generator.
- New antenna design with increased gain (more coverage distance).
- Reduced antenna height.
- New Jamming System Unit design (compact, modular, with more efficient cooling system, increased heat dissipation, more efficient RF power amplifier modules)

## TMP-JAM-X - Jamming System for Military Convoy Protection

- *Frequency range from 20MHz – 3.8 GHz*
- *RF output power up to 1650 Watts*
- *Up to 22 frequency channels*

Military and Police convoys face a serious terrorist risk in many countries, especially in hostile areas of the World, and SESP understands the necessity of providing fast mobilization of a dedicated vehicle for critical situations and missions.

FIELDMARSHAL provides the TMP-JAM-X system to provide the ultimate solution for saving lives which are threatened by roadside bombs (IEDs or RCIEDs). The latest state-of-the-art RF jamming technology coupled with sophisticated preparatory customization of the vehicle provides a complete turnkey solution to combat this threat.
The TMP-JAM-X system is suitable for installation on any Military type SUV vehicle. The special design of the system ensures continuous effective jamming protection whilst in transit in all road conditions, plus all weather capability. Nothing will affect the safe operation of the TMP-JAM-X system.

**Advantages and Features**

- Wide frequency spectrum from 20MHz – 3.8GHz.
- Maximum overall RF output power 1650 Watts
- Up to 22 selected frequency bands within the spectrum of 20MHz – 3.8GHz; each with its individual on/off control. Designed to jam most communication standards, HF/UHF/VHF, within the spectrum.
- Modular jamming system design for easy replacement of individual frequency bands
- AND MANY MORE…

## CAR VIP PROTECTION with TMP-1390LT-H

**Jammer – Very High Output Power 1310 Watts Modular System**
The ***TMP-1390LT-H*** is a vehicle mounted very high power jammer designed for blocking remote controlled improvised explosive devices Used by terrorist.
The ***TMP-1390LT-H*** is using state-of-art technology for maximum performance and jamming the signals transmits to activate bombs.
The unit controlled by Microprocessor for PLL programming and use unique modulation technique based on mixed signal for maximum jamming efficiency.
Each module of ***TMP-1390LT-H*** transmits unique noise signal which create "firewall" between the transmitter and its receiver.
The jamming signal is being generated by Multi-VCO chain which results very high sweeping time along the bands hence create high RF density in each part of protected frequency band.
Jamming radius of ***TMP-1390LT-H*** depends on several conditions such as transmitter frequency and output power, distance to receiver and obstacles between.
System modularity allows flexible usage in different applications.
The system use Broadband Omni-Directional antennas for 360º protection.
**System Features:**
There are 3 modes of operation**:**
**1. Sweep Mode** Jamming the whole frequency band at an ultra-fast. Speed continuous sweeping.
**2. Spot Mode** Jamming 4 frequencies from list of 10 pre-programmed.
**3. Open Communication Window** Allows open communication from 6 pre-programmed options. Thus frequencies can be changed in factory when customer needs.

## Jammer Custom Case - Jammer with 5 frequencies

**Composed by:**
5 jammers with 5 different frequencies
Internal rechargeable battery
For usage mostly in open field (aprox. 200m)

**Technical specifications:**
5 jammers with 5 different frequencies:

- 2145 MHz
- 1850 MHz
- 947 MHz
- 868 MHz
- 434 MHz

5 omnidirectional antennas
Power: 1 Watt
Alimentation 12V - continuous

## Shielded Rooms against Electromagnetic Diseases

Increase of electronic equipments
• Increase of electromagnetic frequencies and diseases inside operative areas
• Increase of requests linked to equipments security
• Need of protecting working rooms from electromagnetic interferences

**New technology**
**Electronic Conductive Textile for Shielded Rooms**
**Advantages:**
1) Lower costs for bulding and installation
2) Perfect pliancy to the internal conformation of the room ( it permits to avoid obstacles as windows or doors)
3) Low maintenance
4) Shorter building time
5) It is easier to configure and eventually extend the room
6) Tailor-made garment on protection needs

**Solution**
We are able to realize shielded rooms with the aid of materials and methodologies as:
• Electronic conductive textile
• Wave-guide filters
• Shielded doors
• Conductive silicones and paints
• High visibility Shielded glass
• Strong installation experience/ability
• Certification and works tests
• On-going/Non stopping research and development on materials aimed to optimize products

## Intelligent Medium Power Wide-Band Jammer

AN ELECTRONIC UMBRELLA THAT PREVENTS THE INITIATION OF IMPROVISED EXPLOSIVE DEVICES BY CELLULAR PHONES OR RADIO FREQUENCY DETONATIONS
*FOR USE IN VEHICES, FIELD AND INDOOR APPLICATIONS*
Black Anodized front panel with engraved writing.
Alodine treatment; size of the chassy: 350 mm. deep, 19 inches, rack.
Bands frequencies (tunable VCO' s driven by saw wave generator)
*-BandA 30- 118MHz 1 W out (30 dBrn +/-ldB)*
*-BandB 118 - 500MHz 1 W out (30 dBrn +/-ldB)*
*-Band C 925 - 960MHz 0.1 W out (20 dBrn +/-ldB)*
*-BandD 1805 - 1880MHz 0.1 W out (20 dBrn +/-ldB)*
*-BandE 2,1-2,5 GHz 0.1 W out (20 dBrn +/-ldB)*
Nominal Frequency and Power level out @ temp 20° VCO Frequency drift in the range 0°... 55° +/- 3 MHz Powered by external DC source 24-28 VDC 3Amp max Mil DC Amphenol Connector type: Part Number
-MS3102A 14S-2P (Panel Male)
-MS3106A 14S 2SSR (Straight Female Plug) RF out connectors TNC Female

## TMP-Jammicro Intelligent cellular radio jammer

TMP-Jammicro is an intelligent jammer, which gives no evidence of jamming to its environment. Jammicro detects the first pulse of a cellular handshake- signal and synchronizes its jamming pulses with the handshake of the target. With this concept the target‘s phone is not able to finish the handshake successfully.
The handshake jamming can also hardly be made detectable, because it is short and also synchronized with the targets normal pulsed handshake.
Jammicro works with internal or external antennas with directional or omnidirectional characteristics. A power pack and a remote control are available as options.
Jammicro intelligent concept can also be designed to a complete jamming network, which will be controlled via a USB-Can converter from a control center
**TMP-Jammicro - GSM 900/1800 MHz**
**TMP-Jammicro 1900 - GSM 850/1900 MHz**
**TMP-Jammicro CDMA - CDMA Version**

## TMP-DEFENDER - Jamming systems for sensitive locations

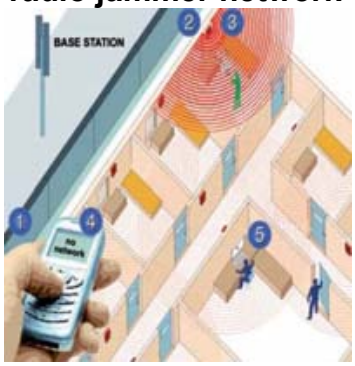
- *Frequency range from 10MHz – 3.8 GHz*
- *Unlimited RF output power*
- *Unlimited number of frequency channels*

The TMP-DEFENDER is a unique and comprehensive range of high and ultra high power systems, developed for permanent installation in large locations such as prisons, palaces, military bases, parliamentary buildings, embassies and large public venues.
Each TMP-DEFENDER system is tailor made to suit the specific requirements of the End User.
The systems are constructed to jam continuously and simultaneously selected frequency channels within the spectrum of 10MHz and 3.8GHz as standard, with unlimited RF output power and number of frequency channels.
The metal enclosure contains an integrated smart active cooling system enabling unlimited continuous operation from AC mains power in extreme hot and cold conditions.
The system is fully protected from unauthorized use, and the remote control unit provides an around-the-clock monitoring facility.

## TMP-PX-Patrol - Special High Power HF/VHF/UHF Communication Jammer Systems

***State-of-the-art a highly efficient*** special high power jammer designed for anti-terror security applications and VIP protection.
***The jammer*** is constructed to jam continuously and simultaneously twelvefrequency bands from 66MHz up to 2500MHz includes most of Walkie-Talkie Radio and Cellular/Satellite frequency standards, and has a total RF output power of 975 watts (Three “Pelican” cases 325 watts each).
***Operator’s Remote Control Unit*** provides ON/OFF function for each individual frequency band as well as full system control.
***High gain external omnidirectional antennas*** are used with the jammer and give you mobility in each current application.
Its "smart active" cooling system enables unlimited continuous use in very hard climatic and weather conditions.
***Ease of mobility, installation and use.***
Simply connect antennas to the Jamming System Unit, install the antennas in vertical position, plug in to DC electricity source and start to operate through a Remote Control Unit.

## SIM-CellStop - Intelligent cellular radio jammer network




SIM-CellStop is a intelligent cellular radio jammer concept; designed to built a complete jamming network, which will be controlled via a LAN network.
Using SIM-CellStop for building monitoring, enables a detection of mobile phone calls with an extremely high probability, if the building is equipped in each monitored room with a position finder.
**SIM-CellStop - so it works:**
1. A prison inmate starts to use his phone
2. The SIM-CellStop detects the active phone
3. The SIM-CellStop starts to block the call by jamming
4. Call failure will be signalized to the inmate
5. An alarm server shows the location of the used phone

*Jamming is temporally, locally and in its frequency limited, slightest jamming outside the monitored system (e.g. penal system)*
*Jamming only in the prison cell with an activated mobile phone*
*Jamming only in the downlink range of the corresponding bands, no broad band jamming*
*Jamming with adaptive transmitting power, controlled by adjustable thresholds*
*Jamming only for a short time, then further search, therefore additional detection and selective jamming of further mobile phones in the same zone.*

# VIP PROTECTION SYSTEMS

## Fleet Management System based on Google Earth

FleetWeb is a system of fleet management based on the Internet.
It is composed of three principal parts:

- Rover
- Server
- Client

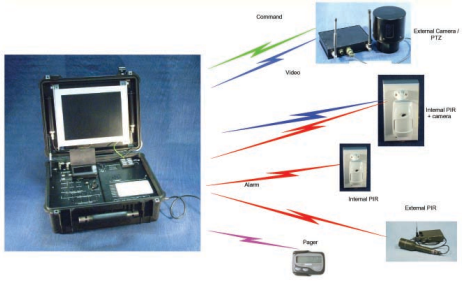
**Rover**
The Rover duty is to gather all information on its position. It receives these information through GPS and it stores them for a certain period of time in case the communication with the server is not available.
**Server**
The server is the place all information coming from the rovers linked to it are stored. All the files containing the list of past locations of those rovers are stored here
**Client**
The client is the part of the system which interfaces the final user. Through the client, the user can start a communication with the server and question it about the

files of the rover (one rover or more). The client consist of an applicative made on the base of GoogleEarth, and therefore, once the information of the files are downloaded, it can show on the screen what was the position of the rover/rovers in a certain date and time, or it can show the sequence of its/their movements during a certain period of time.

**Cryptography**

In order to insure privacy to its users, the fleet-management system above described is equipped with two Levels of cryptography.

## TMPDK - Rapid Deployment VIP Protection Kit



The TMPDKhas been designed to provide rapidly deployable CCTV and intrusion detection for all types of mobile operations.
The TMPDK is a modular system that can be configured according to customer demands and situations.

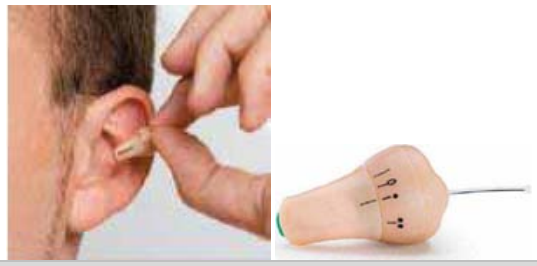
**The standard model includes the following:**

- Fully programmable and portable, ruggedized monitoring case
- 4 x Audio/Video Receivers
- 4 x Wireless and battery powered “Day/Night” camera units
- 4 x Wired and battery powered “Day/Night” camera units
- 4 x Wireless and battery powered PIR detector units
- 4 x Wireless and battery powered Door Contact units
- 1 x Fully programmable Digital Video Recorder with removable 80Gb hard disk
- 1 x 8” TFT Monitor connected to fully adjustable Quad multiplexer
- 1 x 8” TFT Monitor connected to DVR for full Video playback
- 1 x Remote control handset for remote activation of cameras
- Battery packs and chargers for all wireless items (12 units)

**The TMPDK can be configured for any of the following options:**

- Customer specified cameras with PTZ or other options
- GSM/SMS alert module
- Video encryption modules
- Audio encryption modules
- Smoke/Fire wireless detection units or any other form of sensor.

## TMP-RF - The world’s only in-ear RF receiver



The *TMP-RF is reprogrammable. That offers you* security for the future, flexibility, many years of service and the ability to extend existing systems step by step.
The invisity programming set comprises the IPU itself, software (Win) and a USB cable. With them, you can program your *TMP-RF and your TMP-RF* remote control quickly, simply and intuitively.
Depending upon the model, you can read and edit frequencies, volumes, names, serial numbers or comments.
All *TMP-RF units are supplied with a softbox, zinc-air* batteries and wax guards. Sprays and cleaning tools are available for purposes of hygiene. A wireless remote control — itself easy to hide and (naturally) free from wires — can be used to switch between channels on the *TMP-RF 4 or scan automatically for* the current frequency. All products provide feedback whenever needed on the state of the batteries. Just switch on, insert, wear and forget - for up to 13 hours of continuous use.

## TMP-Tyre Protect - Flat Tyre Protection

**TMP-TYRE PROTECT** wheel safety bands are a simple yet effective solution to the danger and inconvenience punctures, blow-outs and under inflation. With TMP-TYRE PROTECT fitted, you have the piece of mind knowing that you can remain in control and mobile, should your tyre deflate - at any speed - on any surface.

**CONTROL**
With the tyre kept in place by the TMP-TYRE PROTECT safety band, steering, braking and cornering control can be maintained at any speed after a simple puncture or an instantaneous blow-out.

**SAFETY** greatly reduces the risk of accident and fatality through loss of control after tyre deflation.

**MOBILITY** provides traction plus a short runflat or get-out capability. The driver can continue to a safe place to change the wheel.

## TMP-JAM-V - Sistema Jamming per la protezione dei convogli VIP

- *Frequency range from 25MHz – 3.8 GHz*
- *RF output power up to 1350 Watts*
- *Up to 16 frequency channels*

Protecting VIPs from the threat of roadside bombs (IEDs or RCIEDs) has become a top priority for Governments and VIP Security Agencies internationally. The TMP-JAM-V delivers the most effective mobile RCIED neutralization, camouflaged inside a choice of several different luxury type vehicles.
The TMP-JAM-V is an ultra high power broad band bomb jamming system which is permanently integrated into the vehicle. The system is continuously and simultaneously blocking those frequencies most commonly used by terrorists to detonate roadside bombs.
The TMP-JAM-V system is suitable for permanent installation inside suitable luxury and SUV type vehicles, such as the Mercedes S Class, the BMW 7 series, the Toyota Land Cruiser and Hummer H2 SUV.

**Advantages and Features:**

- Wide frequency spectrum from 25MHz – 3.8GHz.
- Maximum overall RF output power of up to 1350 Watts in SUV type vehicles, and up to 1000 watts in luxury sedan models.
- Up to 16 selected frequency bands within the spectrum of 25MHz – 3.8GHz, each with its individual on/off control.Designed to jam most communication standards, HF/UHF/VHF, within the spectrum.
- Modular jamming system designed for easy replacement of individual frequency bands.

## Armored Vehicles - Secure and Safe Transportation

- *Armored Vehicles for VIP and Executive Protection*
- *Armored SUV's & Utility Trucks*
- *Armored Personnel Carriers*
- *Cash-In-Transit Vehicles*

FIELDMARSHAL and sells upscale armored vehicles to security companies, law enforcement, homeland security, military, corporations, executives, government officials and diplomats, celebrities and high net worth inviduals. The finished product costs depends on the protection level required and optional anti-kidnapping devices installed in the vehicle.

These armored vehicles are known for their superior quality. The care and quality of craftmanship given each vehicle is self-evident. Hardened steel, reinforced fiberglass, ballistic nylon, and other advanced materials are used to create the unseen protection of armored vehicles by FIELDMARSHAL. In a typical armored vehicle the entire passenger compartment is enclosed in lightweight composite armor that is impervious to all handgun and submachine gun munitions. On special order we can also deliver vehicles armored against all rifle caliber armor piercing (AP) ammunition and hand grenades at CEN Standard Level B7.

## TMP-Walky-Talky - Portable Video Recorder

***W71 x D39 x H110 (mm)***

**Features:**

- D1 (720x480) 30fps , video format H.264
- RTC Time Stamp on Video Frame
- Support Real-Real-time recording
- Audio Record with ADPCM
- Photo Snapshot with VGA quality
- Motion Detecting Support
- Water Mark support
- Security code support under USB mode & playback
- 2.4 inches OLED Display with touch pad.
- Built-in memory with micro SD 4G/8G/16G (optional)
- Support TV out or RF 2.4G/5.8G TX
- Remote control with IR remote and RF digital remote (Signal recall with vibration)
- Walky Talky function with FM radio

## VIDEO RESTORE SYSTEMS

**VIDEO-DETECT**
**Save time through video footage analysis**

Video-detect is a versatile, real-time event detection system for observation video. When you have recorded e.g. 24 hours of footage at a certain location, the software finds the events in predefined area's and summarizes the footage in pieces of interest. Very efficiently and time saving. So you can analyse the tape without waste time, The result: A very clear overview of relevant events. In comparison to ordinary motion detection, Video-detect provides flexibility in mulitple free-form detection area's. Events are based on user defined logic between the detection area's. Also Video-detect is vary stable for disturbances like reflections of head lights, moving branches or changes in wheather conditions. The results are stored on harddisk and/or DVD for later reviewing.

- Input of analogue recorder, multimedia file or hard disk.
- Input of region of interest in rectangular shape in a recorded image.
- Output of detected frames in an image sequence of s / frame.
- Processing on PC-base.
- Output on analogue tape (S-VHS PAL) or in digital multimedia format.

**RESTORE-TAPE** version-6

Restore-tape version 6 is a system for restoration and enhancement of images and video tapes. It uses advanced image processing algorithms for optimal image restoration, enhancement and extraction of required visual information. Special feature of Restore-tape is its graphical user interface. It is designed to use the system efficiently without any redundant mouse clicks, menu's or keystrokes and hardly recognizable icons. All operations are logged in a secured audit trail. The system is free of edit, blend and retouching features. The primary goal of Restore-tape is to provide a powerful and easy-to-use tool for image and video enhancement, primarily intended for criminal investigations and providing legal evidence. Output of Restore-tape is normally accepted in court as legal circumstantial evidence.

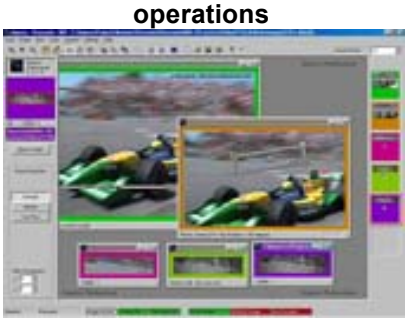
***Restore-tape versions***

**Restore-tape Capture Station**
The low entry system, basic video enhancing properties including FilterQuick pack and the possibility of recording live uncompressed video to RAM memory, displaying these sequences through the sequencer.
Including live demultiplexing.

**Restore-tape Capture Station PRO**
Advanced video processing and enhancing system with a fast internal raid for operating on live uncompressed video.

**Restore-tape ULTRA**
The high-end version, almost all packs are included, meets high requirements in the field of video footage enhancement. It is the Pro system plus Movie pack, the Office pack and Digital pack.

**EXPRESS VIDEO**
**System for image enhancement operations**



The basic system for video and still picture enhancement, dedicated for use by lawenforcement agencies/organisations. – Express video

Besides providing image enhancement operations, the system offers an audit trail with playback possibility for replaying operations, management of cases and a tool for creating court presentations. Optionally, processed video can be displayed on a second, external PAL/NTSC monitor, using different filters for processing the image. Express video distinguishes itself by deblurring capabilities, integration of non-consecutive frames and macro builder facility.

The user interface enables operators without having detailed knowledge of image processing to use Express video effectively. The Express video system is capable of digitizing up to 10 seconds of uncompressed live video to memory. This enables the operator to browse fast through the sequence of frames for selecting optimal images.

## Microtest EV9 Image Enhancer

The EV9 Image Enhancer electronically processes any incoming video signal for maximum image production. It transforms hard to distinguish scenes as seen through a CCTV or video camera into brilliant and crisp images viewed on a monitor, video recorder or printer. The EV9 Image Enhancer competently handles monochrome and colour video signals according to CCIR or EIA standards.
With 10 windows it allows a range of local enhancement according to application. Running off a standard 12V DC input, the EV9 Image Enhancer is simple to operate and can be used in conjunction with both live video feeds and pre-recorded surveillance tapes. Having enhanced recorded video footage once, it can then be enhanced a further 2 to 3 times.

**Applications:**

- Low light surveillance
- Automatic number plate reading
- Diplomatic protection
- Harbours and airports
- Law enforcement
- Facial recognition
- Coastal protection
- Control rooms
- Town centres
- Military sites
- Homeland security

## SIM-VE 300 - Video Enhancer and Noise Reduction

Insufficient illumination, extremely long tele lenses and atmospheric influences like dust and haze often cause disappointing video results.

SIM-VE 300 finds a remedy!
SIM-VE 300 provides a simple plug-and- play solution for all mentioned problems: it suppresses noise, enhances pale colors, restores the contrast of flat video images and thus creates a clear, brilliant video image.

**SIM-VE 300 Features:**

- Works with standard analogue video signals:
  - Suitable for new or existing installations
  - NTSC / PAL auto detection
  - Installation at any point of the video signal flow
- Corrects the following image deficiencies:
  - Over and under exposure
  - low contrast
  - pale, faded colours
  - darkens too bright image areas.
  - brightens too dark image areas
  - reduces noise
- Bypass switch to show original image
- Easy configuration with DIP switches and on-screen menus

**Specifications:**
Plug-and-Play Device
***Video Input:***
• BNC Video composite 1 Vpp at 75 Ohms
***Video Output:***
• BNC Video composite 1 Vpp at 75 Ohms
***Power Supply:***
• 12V DC, 1.2 A

## SIM-ViSta 300 - Digital Real-time Video-Stabiliser

The SIM-ViSta 300 unit is easy to install, as it simply plugs into the analogue video chain anywhere between camera or monitor. This could even be in the ground control unit of an unmanned video drone.
It can be used for stabilising the live feed from a video camera as well as for the post-processing of shaky video recordings.

- Suitable for all standard analogue cameras:
  - PAL/NTSC auto detection
  - composite video input / output
- Corrects all kinds of shake:
  - horizontal (pan)
  - vertical (tilt)
  - rotation
  - zoom
- Stabilises even the biggest vibration amplitudes
- Maintains full CCIR resolution

| | |
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| | • Simple configuration using DIP switches and onscreen menus<br>• Drift free operation<br>• No moving parts |

| **EXPLOSIVES DETECTION SYSTEMS** | |
|---|---|
| **EXPLOSIVES IDENTIFICATORS CRO N.E.T. CRO P.E.T.**<br> | FIELDMARSHAL provides invaluable tools in today's war on terrorism, offering unique solutions to meet ever evolving security challenges. The company applies proprietary technology and unmatched expertise and innovation in the field of explosives to devise user-friendly products for fast, accurate detection of virtually any type of explosive.<br>***Put today's most advanced, practical explosive detection power in your pocket.***<br>IEDs (Improvised Explosive Devices) represent the top threat to civilian security worldwide. The ever-increasing availability of IEDs to terrorist organizations can allow them to bring down airplanes, blast buses and trains, destroy restaurants and shopping centers and inflict massive death and injury. An effective *way* to prevent such sever consequences is the early detection of explosives.<br>**CRO products - Ideal Security Solutions**<br>• Cost effective<br>• User friendly<br>• Completely safe<br>• Instant response<br>• Low level of detection (LOD)<br>**CRO products can save lives when used by:**<br>• Transport Security - Airports / Airlines / Seaports I Train Stations / Bus terminals<br>• Police & Law Enforcement Units<br>• Military<br>• FIF (First Intervention Forces)<br>• Bomb Squads<br>• Private companies, Banks, Mega-Stores |
| **Portable Advanced Explosives Detector - Scintrex E5000**<br> | The E 3500 is the world's first and most recognized portable explosives trace detector that uses Luminol Chemiluminescence (Chemilumina). The E 3500 is the only portable device capable of detecting the presence of all threat explosives, including ICAO taggants, military plastics and TATP. It also does not use any external carrier gas or radioactive source (unlike others).<br>If portability, quick detection and clear, accurate results are crucial, then this is the explosives detector needed. The E 3500 offers extremely fast and stable detection with very high selectivity for explosives and immunity to humidity or contamination problems. The E 3500 detects traces of particulates and vapors, allowing for noninvasive searches of luggage, mail, vehicles, documents and containers.<br>**Operating the E 3500**<br>The E 3500 is flexible and easy to operate, offering both vapor and particulate sampling without the use of an external carrier gas or radioactive source. Vapors are sampled directly via the sampling nozzle. Particulates are sampled by swiping a suspected object with a cotton glove or other means and transferring any traces to the unit. This dual capability enables users to select the most suitable method of sampling for the explosives of interest. The E 3500 starts processing samples immediately and gives results in just seconds. All results are indicated on the LCD graphical and numerical display.<br>**Fast and Proven:**<br>The E 3500 has proven to be capable of detecting plastic and high vapor pressure explosives rapidly—giving clear results you can trust. Luminol Chemiluminescence is an ASTMEPA standard method for atmospheric monitoring of nitrogen dioxide.<br>**Sensitive and Selective:**<br>The E 3500 can detect minute traces (low nanogram level) of C-4, TNT, Dynamite, PETN, Semtex, EGDN, DMNB, RDX, ANFO, Amonium Nitrate, Urea Nitrate, Nitroglycerine and TATP, with low false alarm levels and few interferents. Immune to variations in humidity and environmental conditions.<br>**Portable:**<br>The E 3500 is selfcontained, lightweight, less than 3 kg (6.6 lbs), and comes in a fully equipped, rugged carrying case—ready to use when and where needed. |
| **Detection system for explosives, humans, drugs** | **Equipment Role**<br>The system offers exceptional stand-off detection capability for Explosives, weapons and narcotics. The equipments' primary role is to reduce initial wide area search boundaries down to areas of less than 5 meters. Once this area has been designated, traditional search methods and equipment can be employed. The |

system can also be used as a screening tool for checking all vehicles at roadblocks, check points and border crossings. It has the ability to identify the presence of substance within vehicles, lorries, and all other methods of substance transportation including aircraft. The requirement for random selection is removed. The system can be used for ship to ship search without boarding and will detect substances strapped to the hull or towed behind. The equipment is not affected by on board communications, radar or sonar. IN addition the unit can be used to screen inshore and coastal areas. The system can be used for searching wide open country such as mountains and desert or areas of dense vegetation. Pipelines, electricity pylons and transport routes can be screened from either a helicopter or aircraft.
The system is the most advanced detector in the world, offering a safe working distance from the search area, therefore providing some protection against remote controlled devices. Suspect vehicles and packages can be checked very quickly without risk of detonation. Substances cannot be hidden from detection in traditional disguises such as oil, petrol, metal containers, fish, coffee or other such hides. The system will detect buried substances, so can be used to detect randomly laid mines, extents of mine fields, sea mines and mined roads or bridges.

- Handle 173 x dia max 50, min 35mm
- Card Holder 119 x 100 x 24mm [sizes subject to change without notice ]
- WEIGHT 450g
- ENHANCED INTERCONNECT LEADSILICON, SUPPORTED
- OPERATING TIME UNLIMITED
- POWER SOURCE STATIC ELECTRICITY
- DETECTION METHOD DIA/PARA
- MAGNETISM
- SENSOR CARD MTBF 10 YEARS
- DETECTION ANGLE DIVERGENCE =<5%
- OPERATING TEMPERATURE -40°C to +65°C
- MINIMUM DETECTION QUANTITY TRACE
- SET UP TIME 30 seconds
- DELAY TIME BETWEEN INDICATIONS 5 SECS
- NUMBER OF SUBSTANCES DETECTED IN ONE OPERATION 23
- NUMBER OF SUBSTANCES IDENTIFIED IN ONE OPERATION 1

**Detection Distances**

- General Search 100m sq
- Specific Target Location Land 500m
- Specific Target Location Air 3-5000m
- Specific Target Location Sea 1-2000m

## Rapid Parcel X-ray for Explosives, Weapons & Narcotics

**Clearly images for:**
**Airports, Ports, Courts, Customs, Military, Corporate, Government Buildings, Postal, Prisons, Nuclear, Access Control, Special Events, Police, Rail or Bus Stations.**
The AUTOCLEAR® 4626 (46.0 cm wide x 26.0 cm high, 18.1” wide x 10.2” high opening) is compact, lightweight and ergonomic for briefcases, purses, cameras, laptops, backpacks, shoes, coats, mailbags, bins and parcels.
***Overall Dimensions:*** 109.1 cm (43.0”) L x 58.4 cm (23.0”) W x 103.6 cm (40.8”) H
***Inspection Capabilities***
Tunnel Size: 18.1" wide (46 cm) 10.2" high (26 cm)
L-shaped detector for 100% package screening.
Material Penetration: 10-11 mm (0.39-0.43”) steel, twice the penetration in its class.
Contrast Sensitivity: Over 2 million color tones standard.
Resolution: 40 AWG wire.
Processing: 32-bit adaptive image processing with minimum 128 Mbytes memory; 800 MHz, 2.4 GHz or higher processor.
Conveyor Speed: 48 feet per minute; 24 cm per second. Fully reversible.
Pulling Weight: 100 kg (220 lbs) standard; 200 kg (440 lbs) option autoTracking®: Belt guaranteed to autoTrack for life.
Film Safety: Guaranteed for high-speed films up to ISO 1600 (33 DIN). *Full autoSensing® without troublesome Reduces downtime and assures all magazines, envelopes or photosensors, moving parts, or footpad. items are scanned, no matter how thin, or of bag already in tunnel at start-up. Enhances radiation safety.
***X-ray Generator***

- X-ray tube head: Self-contained
- High voltage rating: 90 kV standard
- Duty cycle: 100% with sealed oil bath cooling
- Beam orientation: Diagonal (80° beam divergence)
- Dose rate per exam: 0.1 mR. Lower doses available.

***X-ray Detectors***
Surface mounted, multilayer, fully integrated, high frequency, solid state detectors

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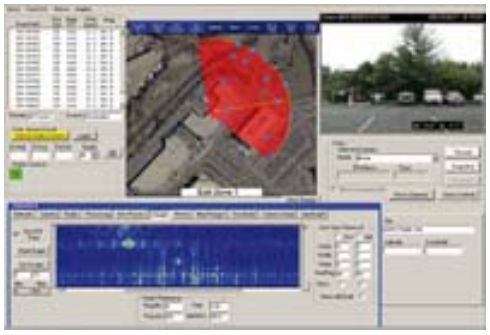
| | using high speed processors, and Pentium 4 image processing with Single Energy or optional Multi-Energy (M) Color.<br>***Video***<br>Standard with color 17" LCD flat screen monitor. High resolution, flicker-free, low rad., low energy monitor, 1280 x 1024 video card. Single energy color is based on object density. Multi-Energy option available with second monitor, CRT(s) or larger monitor(s), displays organics in orange and inorganics in blue, both overlapping in green and very dense objects in black, and includes Organic and Inorganic Stripping. |
| | |
| **Digital Mail/Parcel X-ray - Compact, Low-dose Color Scanner Rejects Bombs,Weapons and Threats**<br> | **The 3920 is a film-safe, really compact fully featured digital scanner, with no corner cut-off.** Personal attacks by parcel and letterbombers, anthrax and other aggressors promote uneasiness and vulnerability.<br>Proven against bombs, weapons,narcotics, persons and other threats. For higher scanning throughput, larger items, with airport security features, consider our compact 4626 or 5333 through-conveyor systems.<br>The Desktop 3920, featuring a 39 cm (15.4") wide x 20.3 cm (8.0") high tunnel opening is an ultra compact, portable, all digital, color, foldedarray, cabinet-conveyor X-ray system for inspecting briefcases, food, purses, clothing, electronics, cameras, shoes, mailbags, bins and parcels.<br>***Ideal for:***<br>• Mailrooms<br>• Government Buildings<br>• Police Stations<br>• Embassies<br>• Professional Offices<br>• Courts<br>• Media Houses<br>• Banks<br>• Hotels Checkpoints<br>• Acounting & Law Firms Workplaces<br>• Sensitive Areas Executive Mail<br>• Special Deliveries |
| | |
| **Mobile Radar System**<br>  | **Mobile Ground Radar for detecing persons, vehicles, etc.**<br>**Software Control with Radar Visualization and Video Display**<br>This mobile ground radar system provides you with a flexible tool to detect persons or vehicles at distances of up to 15 km.<br>Ideally suited for border control, perimeter protection of temporary camps, hostage-taking, etc.<br>**AIMS Vehicle Security System**<br>(AIMS: Antenna Integrated Mobile Scanner)<br>• AIMS Fast-Scan<br>• Roof rack mounting system<br>• Operates under motion (up to 100 km/h) or at rest<br>• Integrated camera control for automated pointing by radar<br>• For flat areas (like airports) with:<br>  ○ Algorithms compensating the motion of the radar vehicle<br>  ○ Detections plotted on digital map or compass rose<br>  ○ Built-in camera control<br>• For rugged and remote areas, order with additional:<br>  ○ GPS and digital compass |
| | |
| **Molecular system for localization of substances at a distance**<br> | This array is capable to identify the molecular structure of the tested sample ONLY. Insulating and reproducing the elecstrostatic "signatore" of the sample.<br><br>For example notices that the left tab is permeated with the electrostatic "signature"of the substance sample, which is itself "trapped" inside the plastic bag. Once insulated, the electrostatic "signature" of the substance sample, it can be easily be noted that , if shaked/placed upon a sensor, acts for "seeking" the real once. It is therefore the creation of measuring tool, which is able to "charge electrostatically" and then follow the "movement" of the substance's molecules.<br><br>A real, simple and effective tool, made in though material ABS type.<br>The antenna is in metal and free to move horizontally on its support.<br>The molecular flow sensitive to the substance will attempt to find " the shortest way" through the antenna's stylus.<br><br>The system has already been used in various situation such as:<br>**SMUGGLING CONTROL**<br>• Airports<br>• Frontier areas<br>• Ports<br>• Containers Control at ports |

- Sensitive urban areas

**MONITORING FOR EXPLOSIVES PRESENCE**

- Government Buildings
- Buildings of strategic relevance
- Ports
- Highways
- Sensitive urban areas

## TMP-3.2E CHEMICAL DETECTOR

**KEY FEATURE**

- Small and light detector that continuously detects war's chimical agents and toxic chemicals providing real time data.
- Advanced IMS Technology that uses a non-radioactive source.
- Access ports to use the computer, headset or network cable.
- Over 40 h operation with batteries AA type
- Available in 5 colors.

**TMP-3.2E** represents a new generation of sophisticated detectors for war chemical agents, small and light , that will revolutionize the individual protection of the twentyfirst century soldier. TMP-3.2E contains a non-radioactive source, its volume is smaller than 492 cm3 and weights less than 0,45 kg. mainly used as a personal non-intrusive detector, TMP-3.2E continuously detects samples of air for traces of nirvin agents, vesicants, tossic chemicals, haematochemicals or suffocating, allowing the operator to take appropriate measures. If used in control mode, the device has the the ability to examine the cargo,equipment, facilities or personnel. The device can also be used on mobile or fixed platforms, including vehicles, ships, aircrafts and installations on fixed location.

## TMP-RGS - Remote ground sensor system

FIELDMARSHAL is able to supply specialist remote ground sensor elements designed for external deployments.

The RGS system is a wire free alarm system tailored for rugged external deployments using passive sensing techniques.

The RGS system is intended to covertly monitor a perimeter or area for personnel and/or vehicle movements and provide alarms. It can be used at critical points or in dead ground up to 3 Km from the operator.

The basic system consists of a Hand Held Receiver and a number of remotely deployed Sensors and Transmitter / Sensor Processor units.
The system is compact, robust and easily deployed. It provides the User with flexible detector options, to enable the remote monitoring of most scenarios.

## TMP-SCAN-400 Ground Penetrating GEO Radar

TMP-SCAN-400 Ground Penetrating Geo Radar is designed to detect point and extensive metallic and non-metallic objects in various nonmetallic mediums (such as a ground, water, building units etc).
The results of scanning are displayed on the screen of the recording device in real time and then the results of scanning are saved to file for processing and printing.
The device can be operated with the ambient temperature range from -20ºC to +50ºC at the relative
humidity up to 95%.

- Geo radar
- It can be used by army and policy squads for searching ammunition, hiding-places and underground channels in outdoors territories, buildings and constructions.
- Super wide band signals and special software for their processing along with complex of replaceable antenna arrays implemented in geo radar provide unique combination of searching capabilities

## TMP-MScope Walk-Through Metal Detector

**Is the World's Most Versatile Walk-through Metal Detector.**
When we say portable we mean a truly dynamic detector capable of being rapidly deployed within minutes instead of hours. With only one operator the TMP-MScope can be deployed and transported to virtually any location and be up and running within five minutes! With a battery life of 40 hours, a total weight of 87 pounds (42 kilos), and a unique one-person transport configuration when collapsed, the TMP-MScope will empower you with before unavailable security solutions. No need for a truck – the TMP-MScope is the only walk-through that can be moved in a van or even a car.

The TMP-MScope operates on AC (110V or 220V) or DC power. Due to its feature and function benefits the TMPMScope addresses a wide variety of security needs. It is the smart choice for professionals requiring a walk-through detector in a permanent location as well as needing to move it to multiple locations, even on short notice. The best of both worlds plus a true cost saver.
Police departments worldwide have used the TMP-MScope for random screening on streets or in train stations. Other typical customers include schools and courts who need the specifications found in more expensive detectors. Night clubs and bars select the TMP-MScope because it is quick to put up in the evening and take down in the morning. The TMP-MScope is used to secure numerous government and military buildings, especially for applications where additional security must be rapidly deployed.

## TMP-G3 Portable Wireless Controlled X-Ray System

The TMP-G3 X-Ray System is a portable, wireless, easy to use and completely computerized Inspection System for the investigation of objects like parcels, boxes, luggage etc.
The System consists of a remote control unit, a camera box, the XRay source and accessories.

Specific customised software and computer systems enables the unit to start within a few seconds. No knowledge of computer, operating systems or software is needed to operate.

Camera unit, remote control and all accessories are placed in only one housing during transport saving space and weight.

The TMP-G3 system works fully digital for most failure-free operating and sharp pictures.
The wireless connection allows up to 150m outdoor or 50m indoor distance for save operation.

The TMP-G3 is a fail-save, precise and easy to use equipment for law enforcement, police, airport and all kind of safety purposes. The system can also be used in any kind of material examination.

## DAY & NIGHT RECORDING SYSTEMS

### VIDEO POLE CAMERA

**Detect hidden devices with the Video Pole Camera**

The TMP-C12000 is a highly portable viewing system, providing the user with unrivalled capabilities for low light inspection of rooms, buildings, containers, aircraft, ships, vehicles and packages.
The TMP-C12000 is currently in use with EOD search teams, professional sweep teams, tactical units and SWAT teams. The TMP-C12000 is ideal for short-term surveillance ideal for searching attics, drop ceilings, over-head compartments, under office furniture, around corners or other difficult to access areas.
**Features**

- Excellent images in low light conditions
- Standard and compact head models
- Lightweight, high quality robust construction
- Covert surveillance model, including illuminator
- PAL or NTSC

### TMG11 Video Surveillance

***Key features***

- 11 -megapixel resolution
- Recognise people and vehicles at over 100 metres
- 45-degree view

- Equivalent to 50 PAL cameras
- No operator required - zoom in AFTER the event

***Applications***

Applications include attended or unattended surveillance of large areas such as:

- hot spots of anti-social behaviour and environmental crime
- internal and external monitoring of pedestrian zones, roads and concourses
- construction sites, stadiums and car parks.

***Configuration options***

The TMG11 system can be deployed in two main ways:

- Stand-alone "redeployable" unit with onboard video storage. Alternatively the storage can be located near the camera and linked by Ethernet cable or wireless.
- Cameras linked by IP transmission to a remote storage site e.g. control room. When used together with an unzoomed PAL camera, all the images from both cameras are transmitted down the same cable.

## Cylinder Camera - Wired & Wireless – Night & Day

Weightless camera night & day, modular, remote controlled by mechanism Pan & Tilt on the head of the camera. It can be used indoor or outdoor. The camera can function in remote by cable. It is also available with the duplicator of focal 2x, which integrates a modular and mobile system and includes:

- Miniaturized Chamber pan & tilt
- Remote control

**Specifications:**

- Optic zoom 36x (it allows the view of a detail, i.e. licence plate or facial characteristics up to 500 mt.)
- Intelligent Control of the lens (Sony Modular Automatic Lens Reset Technology)
- Function Electronic-Flip (And-Flip)
- Alarm function
- Auto ICR mode
- Serial Interface to high speed (max. 38.4 Kb / s) with TTL

The **remote control case** can pick up images and sounds to be recorded; it controls the rotation and the functions of the camera and other compatible cameras: zoom, turn on/off, speed of the zoom, management of the rotation to 350°, night / day function.
It's also possible to rebroadcast by remote via ethernet, gsm, isdn, IP.

## TMP-R14 Tactical Helmet Type Wired Covert CCD Camera

**Features**

- Fine integrated & compact regular headset outlook design with concealment & convenience feature
- Superfine picture quality with high resolution CCD sensorfordemanding surveillance application.
- Powered directly from our PVR series or the battery box in standard kit. Two solutions for variety scenarios.
- When works with any of our PVR and Wireless Kit a battery box is not needed
- Traffic or Patrol Police-record any offense taking place on scene.
- SWAT team-recording during crack down or rescues missions.
- Security guard-record the scene when on duty.
- Education to use-recording the
- Lectures tutorial for reviews reference.
- Out door excise-record all kind of outdoor activities.

## PRD-OMS - Portable Rapid deployment Observation and Monitoring System

The Portable Rapid deployment Observation Monitoring System (PRD-OMS) is designed to cater for all static urban and rural surveillance operations. PRD-OMS provides ultra long range Surveillance Target Acquisition using its combination of day or night sensor technology providing much higher times magnification than normal spotting scopes in service today.
PRD-OMS is man portable and can be rapidly deployed within a few minutes. With its uniaue remote monitoring system, surveillance operators are able to monitor and record information observed from the target area well away from where the sensor platform is deployed. This allows operators to work in complete safety and allows the use of multiple observers without compromising the position of the sensor platform.

**Capability:**

- Colour video display up to 71 Ix magnification
- Optional night vision image intensified video up to 519x magnification
- Optional naked eye night vision image intensified observation up to 253x magnification
- Rapid deployable - Man portable (20kg approx.)
- Able to monitor and record target information away from sensor platform.
- Long Range High Magnification.
- Provides extra security and stand off for Operators.

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| | • All equipment is self contained within its own webbing Pack pack. |
| | |
| **HYPERSPECTRAL RESEARCH CAMERA**<br> <br> | **Developing hyperspectral imaging applications in following areas:**<br>• Precision farming<br>• Medical research, ophthalmology, dermatology<br>• Resource management<br>• Food safety & quality<br>• Forensics, criminal, art, material engineering<br>• Gemology<br>• Military<br>**Hyperspectral R SERIES**<br>The 100R Product Line is the newest in a series of sensors that uses a convex grating reflective spectrograph design.<br>The 100R Series now gives our customer base a choice between transmissive and reflective systems.<br>The 100R Series also incorporates a patented line scanning technique (U.S. Patent No. 6,166,373) that requires no relative movement between the target and the sensor.<br>VNIR-HW<br>UV (200 - 400 nm) / VNIR (400 - 1000 nm) / SWIR (900 - 1700 nm & 1000 - 2500 nm)<br>**Hyperspectral T SERIES**<br>The 100T Product line is our first hyperspectral product in a series of sensors that will span the spectrum from ultraviolet to the infrared. The 100T measures the intensity of reflected energy from any given target at hundreds of narrow wavelengths and stores that information in a digital image format, called a hyperspectral image. Each image contains a complete reflectance spectrum from a given range (UV/VNIR/SWIR) of nanometers for every picture element in the image. |
| | |
| **DAY & NIGHT OBSERVATION SYSTEM**<br> | • Rapid Deployable Man Portable System<br>• Housed inside Ruggedised Airportable Boxes<br>• Sensors include Day, Night and Thermal Cameras Incorporating Image Fusion Technology<br>• Variable Speed Head with Motorised Zoom & Focus<br>The DANOS surveillance observation unit which incorporates Image Fusion Technology as standard is designed to cater for all surveillance requirements in normal to extreme environmental conditions.<br>DANOS provides short, medium to long range Surveillance Target Acquisition using all 3 sensor technologies with the added benefit of incorporating Image Fusion. DANOS is capable of infinitely variable integration of two or three different sensor technologies at the same time. Remotely powered and supplied ready for use.<br>**Standard Specification**<br>• Sensor Head: TIU2 thermal camera,12°,9° or 6° FOV Horizontally<br>• Colour Daycam with 22x zoom lens, 21° to 1°.FOV Horizontally<br>• NIC Hypergen or XD4 intensified camera with 22x zoom lens, 41° to 2° FOV Horizontally<br>• Head support bracket, cabling, tripod and motorised pan/tilt.<br>• Sensor outstation rechargeable battery pack in hard transit case, with 220-240/12v AC/DC converter. |
| | |
| **MICRO Sistema di osservazione Day&Night** | - **3 Sensor Systems:**<br>• **Thermal Camera**<br>• **Day Colour Camera**<br>• **Night Vision II Camera**<br>**- Rapid Deployable Man Portable and lightweight**<br>**- Housed inside Ruggedised Airportable Box**<br>Micro DANOS is a high performance, low cost, man portable, very rapid deployment surveillance platform for short and medium range applications in field and urban situations.<br>It gives the user state of the art technology in the longwave thermal infra-red band for man detection in total darkness up to 475 metres, full image intensified night vision camera technology for identification and number plate reading and high resolution colour video for day operation at a price level compatible with even the smallest budgets.<br>**System Features**<br>Micro DANOS is a 3 camera 24/7 rapid deployment short/medium range surveillance system designed to give high performance at an exceptionally low cost. |

The camera head unit comprises a state of the art uncooled Thermal camera for detection in the darkest of situations combined with an Image Intensified camera for identification at night and a colour CCD camera for day use, all with fixed focal length lenses giving a similar 12½º nominal field of view.
Its three sensors, Thermal, II and colour, are each selected by the operator from a simple, user friendly control box
which also controls the Thermal black hot/white hot selection and which features a failsafe protection in the case of unintentional activation of the II camera. The complete head unit is mounted on a quick-release professional quality manual pan/tilt head on a robust lightweight tripod.
Live video output is composite PAL which can be displayed on any compatible CCTV monitor and power is 12V DC from a 220/240v mains power supply provided. As options a rugged LCD monitor and rechargeable 12V battery pack can be supplied for total system autonomy.
The complete installation is supplied in a fitted compartmented hermetic transport case, tripod separately.

## Mini Day&Night Observation System

- 3 Sensor Systems:
  - Thermal Camera
  - Day Colour Zoom Camera
  - Night Vision II Zoom Camera
- Rapid Deployable Man Portable and lightweight
- Housed inside a ruggedised, compartmented, airportable, wheeled box
- Motorised pan/tilt
- Rugged waterproof LCD monitor station

Mini DANOS is a high performance, low cost, man portable, very rapid deployment surveillance platform for short and medium range applications in field and urban situations.
Its three sensors, Thermal, colour zoom and image intensified night vision zoom, are all selected and controlled remotely by the operator from a simple, user friendly control box which also operates the pan/tilt head. The instantly selected camera video picture is displayed remotely on a rugged waterproof 6.4" high-resolution TFT LCD monitor with removable sunshade.
Autonomous power is supplied from rechargeable battery pack or from any 12 VDC supply.

## NIM-NIGHT INTENSIFICATION MODULE

NIM is a small lightweight optical module containing the latest in image intensifier technology.
NIM can be used with any CCTV camera and compatible CCTV lenses. It requires only 12v DC input and can effectively turn any day camera into an extreme low light surveillance system.
Compatible with 1" format lenses
Compatible with 1/2" & 1/3" cameras
Very simple and very quick to install
Tripod Mountable
Gain in excess of 20,000

**Optical**
Magnification 1x
Field of view Depending on lens/camera configuration
Objective lenses
Mounting type "C" mount (1"-32 TPI) interchangeable
Lens options A complete range of 1 inch "C"mount lenses including zoom, tele and wide-angle

**Electrical**
Power requirement 12v DC

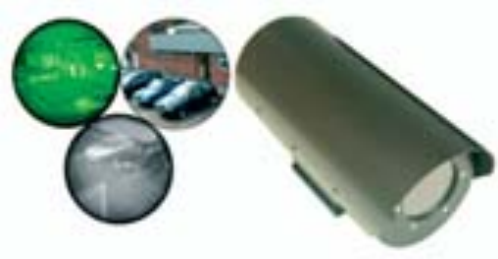
**Physical**
Dimensions 73 mm (L) x 44 mm (Dia)
Weight 216 gms
Tripod mount Standard ¼" UNC threading

## TRICAM 1500 - Day/Night changeover camera

**"Tricam 1500 is genuinely revolutionary, incorporating 3 different sensors"**

- Clear identification of persons at 3 kilometres
- Colour
- Low Light Monochrome
- Image Intensified
- Cost effective employing one lens
- Lightweight
- Ready for installation
- Composite PAL video output
- Free standing or integrated with any CCTV system

Tricam 1500 combines three technologies to provide the optimum sensor for the prevailing conditions.



Colour for day time surveillance offering high resolution detail and long range identification.
Selection of I.R. Enhanced Monochrome extends day use to dusk and dawn and Intensified takes care of the darkest part of the night.
Camera selection is by customer input and the system is designed to be compatible with existing or new standard CCTV equipment.

**Optical**
Lens: 12.5mm−1500mm
Including 2x extender f3.8-T3000 - auto iris
Continuous zoom
Focus 5m to ∞

**Sensors**
Colour: 480 TV lines, Minimum illumination 0.2 lux 1/3" sensor
Monochrome: 570 TV lines Minimum illumination 0.00015 lux 1/2" sensor
Intensifier Camera 570 TVL 1/2" sensor 5 optional tube performance levels

**Physical**
Dimensions 233 mm wide x 225 mm
hight x 650 mm long
Weight 8.1kg

## VERTIGO – Covert Surveillance

Vertigo offers a unique covert answer for surveillance operations with its roof top housing containing high resolution camera and lens and incorporating pan and tilt sysystem.
Vertigo can be positioned by law enforcement officials to watch and record in an urban environment without detection.
Vertigo is built to withstand the environment in which it is used and has been proved in the field to be a highly effective covert surveillance device.

- Equipped with long range lens and camera to suit.
- Available in colour, monochrome, thermal or image intensified.
- Easy to set-up, carry and display.
- Compatible with existing telemetry equipment or can be controlled locally with its own control box.
- Ideal for short, medium or long term operations.
- Rapidly deployed.
- Man portable.

## Discover - Laser camera

Discover represents day/night vision technology platform that combines an innovative, near infra-red, continuous-wave laser illumination beam with an automatically synchronized CCD imager enabling unsurpassed details and clarity at night while leveraging the same optics capabilities during the day. This versatile surveillance assessment tool delivers high resolution, continuous zoomable, glass penetrating, natural contrast video in any lighting condition, including zero light. The multiple Discover models address different magnification and range requirements for border, perimeter, and investigative surveillance applications. Discover's hardware and software architecture enable rapid integration with many related technologies including: intrusion sensors, thermal imaging sensors, ground and marine radars, and access control points.

**ADVANTAGES**

**Natural Contrast**
High Resolution
Clearly view targets with high
quality 640x480 natural contrast imagery in zero light; People and written text are discernable. Discover video is legal court admissible.

**Long Range**
Continuous Zoom
Assess potential threats at long distances (up to 3000 meters in zero light) with continuous zoom (26x for Discover 1000; 60x for Discover 3000). Ideal for efficiently covering borders and perimeters

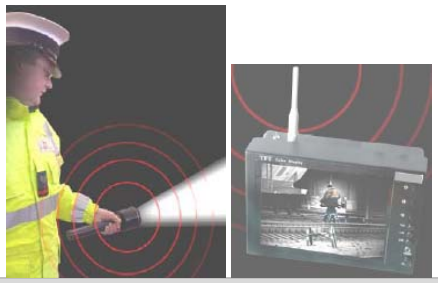
**Through Glass**
Human recognition and identification through normal and tinted glass is invaluable to investigative services and border and perimeter applications

**No Blooming**
No image over-saturation for existing light in scene; Discover model s can handle a wide dynamic range of light in the field of view.

**24 hour versatility**
Single surveillance system for day and night operation; same resolution, same zoom, same camera controls

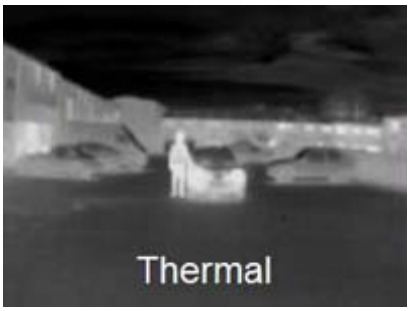
**Ease of Use**
Intuitive user operation and rapid training; no eye fatigue common with thermal IR systems

**Ease of Support**
Minimal maintenance and support required; highly accurate and environmentally durable housings and
motors, laser module has a 24,00 hour MTBF

| | |
|---|---|
| **Torchcam**<br>  | Torch-Cam. When you are on patrol, the Torch-Cam provides you with a new level of security. By constantly transmitting both real-time video and audio of events as they occur you are no longer alone and exposed – you colleagues can see everything you see, hear everything you hear… and provide the backup if you need it!<br><br>Built into your torch is a high performance, evidential qualità CCD Camera, a compact radio frequency (RF) Transmitter and, of course, a high intensity, high reliability, solid-state light source. In addition, to provide you with even greater security and your team with the element of surprise, the Torch-Cam incorporates a 'panic' button. This sends a silent signal back to your colleagues telling them that assistance is required. |
| **TMP-DAN - Long Distance Identification System for Day/Night**<br> | **Long Distance Identification System for Day/Night with enhanced performance penetrating Fog and Haze**<br><br>The TMP-DAN camera system in¬corporates a revolutionary EMCCD low light system with invisible long distance illumination, which makes it especially suitable for perimeter surveillance at sensitive installatio¬ns such as border controls, military bases, ports, airports, petrochemi¬cal sites, and telecommunications infrastructure.<br><br>This camera system can capture a target hidden in total darkness and shielded from human sight – and does so in full-frame colour / b&w video at the full 25/30fps frame rate.<br>No noise, no ghost structures - only crystal clear video surveillance images unaffected by the light conditions. |
| **TMP-R17 Walkie Talkie Transceiver recorder**<br> | The TMP-R17 Walkie-Talkie Transceiver Recorder is a fully functional shoulder mic which houses a video recorder, audio recorder, and still photo camera.<br><br>The TMP-R17was designed to save departments and individual officers' time and money. On-site, up close video and audio recordings document what actually happened during an incident protecting departments and individual officers from frivolous law suits. The TMP-R17also reduces hours spent on report writing. Second by second time/ date stamp and specific departmental input codes support the implementation of a chain of custody of evidence protocol.<br>A USB/ mini USB connector cable is used to connect to the wall charger, car charger, or the computer to charge the battery.<br>We provide two supporting software to help you to view the video slips, audio slips, and photo. |
| **SIM-WPH - Weatherproof Housings IP-68**<br> | **Designed for outdoor applications**<br>**Available in various sizes and colours**<br>**Optional Sun Shield**<br>**IP-68 protection class (for operation in deserts, storm, rain, etc.)**<br>We stock a variety of weatherproof camera housings – both standard and custom made models. This line of housings covers the whole spectrum from miniature cameras to long-range MultiSensor systems.<br>The enclosures are made of stainless aluminium and will protect your cameras even from the harshest environments (IP68 protection class). The front window consists of self-cleaning glass (Clearshield / lotus effect).<br>• Material: aluminium<br>• Standard colours: black, white – other colours available on request<br>• Camera window: Clearshield glass with lotus effect<br>• Protection class IP68: pressure tight up to 300 mbar<br>• Heating and thermostat (60 Watt or 120 Watt)<br>• Internal camera carriage<br>• LEMO cable connector<br>• Bottom side prepared for mounting (e.g. to pan tilt head)<br>• Power supply: 12VDC or 24VAC |
| **SIM Power Supplies** | ***Mobile 230 VAC Power Supply***<br>***Rugged Housing***<br>***From 24 to 70 Ah Capacity (depending on the model)*** |

| | |
|---|---|
| | Built into a rugged PeliCase: Power station with charger, DC/AC inverter, and deep discharge protection. The unit provides 230 VAC mains and 12 VDC outputs. The unit operates noiselessly.<br>Contains 12V accumulators with a total capacity of 24 Ah and a max. output power of 63 W. |

| **THERMAL CAMERAS** | |
|---|---|
| **T-iV HD – Handheld thermal imager**<br> | Leading the field is the new High Definition Thermal Imaging Viewer (T-iVHD). Weighing only 1.7Kg complete with battery, the T-iVHD will enable you to recognise a man at 1000m. This world leading performance moves the T-iV family into a new league... more than rivalling the recognition range performance of cooled units. As with the other members of the T-iV family, the unit is fully automatic and, unlike most other units, requires no operator intervention if it needs to recalibrate. Its unrivalled resolution (640x480 pixels) is 400% higher than comparable US imagers and 300% higher than any other uncooled handheld imager from Europe today.<br>In addition, the sophisticated image processing hardware/software provides pin sharp images automatically.<br>**The advanced T-iVHD features:**<br>• Unrivalled resolution (640x480 pixels)<br>• Instant On - image in under 3 seconds<br>• Man Detection at 2000m<br>• Man recognition at 1000m<br>• 6 to 8 Hours Operation<br>• Automatic operation (focus required)<br>• Instant (0.4 sec) automatic calibration and re-calibration<br>• Lightweight , approximately 1.7Kg<br>• Remote Control facility<br>• Electronic Focus & Zoom<br>• No eyepiece adjustments required<br>• 400% Higher resolution than US imagers |
| | |
| **T-iViewer 320, Snapshot, HR**<br> <br> | The Thermal Imaging Viewer (T-iV) is a fully self-contained, state-of-the-art thermal imaging camera designed for medium to long range surveillance.<br>**Operational Uses**<br><br>**The T-iV enables you to:**<br>• Operate in TOTAL darkness<br>• Operate Day or Night<br>• Detect human targets at ranges exceeding 1Km<br>• Detect recently disturbed ground (buried objects)<br>• Detect vehicles at ranges well in excess of 2.5Km<br>• Operate in battlefield smoke, mist or teargas<br>• Detect potential targets in light foliage<br>• Identify recently operated vehicles<br>• Detect hidden compartments<br>**The unit is designed for professional organisations including**:<br>• Border security organisations<br>• Police<br>• Customs<br>• Anti-terrorist organisations |
| | |
| **Pocket-T - Surveillance Camera** | The operational benefits of thermal imager sensors to gather vital intelligence is widely recognised However, until now thermal imaging cameras have been large, heavy and unreliable. The Pocket-T surveillance camera will change the way you see thermal imaging systems forever.<br>As its name suggest, Ihe camera is designed to fit into your pocket ready far instant use. Simply press and hold the button on the top of the unit and you will be able to see in total darkness, see through mist and smoke and undertake surveillance operations in conditions where conventional image intensifier technology cannot be used.<br>The Pocket-T camera gives you much more than just the ability to see in TOTAL darkness... you can use it to locate hidden compartments in vehicles and |



buildings, recognise if a vehicle has recently moved and monitor sensitive border crossings even when shrouded in mist! Unaffected by even the brightest lights the Pocket-T camera is ideal for both urban and rural observation actions.

- Excellent range performance - detection of a man at - 300m
- Video polarity control - improves scene interpretation
- Fully automatic operation
- Manual focus enabling the camera to operate indoor and outside.
- Eyepiece adjustment to facilitate use with, or without, spectacles
- Up to 4 hours operating duration (assuming normal usage)
- Uses any available AA batteries (2) (Alkaline w Rechargeable or Lithium
- Batteries changed in seconds

**Operation uses:**

- Fugitive Search
- Intruder detection
- Border Surveillance
- Perimeter surveillance
- Drug interdiction operations
- Covert surveillance operations
- Detection of illegal immigrants

**Enables you to detect :**

- Disturbed surfaces
- Buried material or human remains
- Hidden compartments
- Concealed weapons
- Detect visually camouflaged targets
- A man in light foliage
- Identify recently operated vehicles

## T-Cam 320

Designed specifically for OEM applications, the T-CAM320 is the affordable way to upgrade you surveillance/security system to benefit from infrared sensor capability.
Based on the 320 x 240 pixel uncooled IR detector, the T-CAM320 is a compact, 'plug and play' IR Engine that can accept a wide range of IR lenses to provide you with the optimum solution for your IR vision requirements. As the T-CAM32Q does not utilise a cooling engine, it can provide true 24/7 surveillance without the costly maintenance typical of cooled systems.
Based on state-of-the-art infrared technology, the T-CAM320 has all the advanced features you demand, including:

- PAL or NTSC Video oulput compatibility - true 50HZ field update (60Hz for NTSC systems)
- High sensitivity (80mK NETD)
- Range of high performance IR Lenses available (Focal lengths available include 13.5, 18, 50, 75, 100 and 150mm)
- Dual field of view lenses also available.
- Fully automatic operation
- Integral, shutter for calibration if Operates from 7-9 Vdc
- Video Polarity function as standard
- X2 Zoom function as standard
- Readiness time less that 25 seconds at 21°C
- High reliability (No cooling engine required)

## Photon Fire Camera

**Why Helmet Mounted...**
Thermal imaging cameras give you back what you need most to perform their task - sight. However, hand held cameras restrict your ability to undertake even the most basic tasks like using an axe to obtain entry or rescue a victim...

The PHOTON Handsfree gives you the best of both worlds...
**VISION & FREEDOM of movement.**

**With the PHOTON Handsfree you can:**

- Climb ladders and stairs
- Carry victims to safety

- Use tools effectively
- Handle the hose
- Clear obstacles

What's more, because your hands are free, you can use your standard, tried and tested, operating procedures without compromise.

Compatible with most fire helmets is common use throughout Europe, The PHOTON Handsfree is a lightweight yet robust helmet mounted thermal imager and advanced display that gives you everything you need to perform your task quickly, efficiently and with the minimum risk.

Designed and tested to withstand the rigors of firefighting the unit is available with all the features and facilities you demand, including:

- Temperature Measurement
- Colour
- Video Transmission

## Mini TIU2 - Thermal Surveillance Camera

Mini TIU2 is a compact thermal-imaging camera designed for use in 24-hour surveillance systems where detection is essential.
Mini Tiu2 requires no light and is a CCTV detection system without parallel for day & night performance.
Available in 3 models, wide, mid and narrow, Mini TIU2 represents a breakthrough in CCTV. Mini TIU can be installed as part of a new or existing CCTV system and is compatible with all ancillary equipment including receivers, multiplexers and pan and tilt systems.
At a cost unheard of before now it is possible to install a high tech solution to the problem of true day night surveillance.

**Applications:**

- Perimeter Surveillance
- Customs
- Border Control
- Law Enforcement
- Portable Crowd Surveillance
- Outdoor Event Security
- Diplomatic and VIP Security
- Port/Harbour Security

## Mini TIU2 HD - Thermal Surveillance Camera

Mini TIU2 HD is a compact thermal-imaging camera designed for use in 24-hour surveillance systems where detection is essential, employing high resolution 320 x 240 pixel display.
Mini TIU2 HD requires no light and is a CCTV detection system without parallel for day & night performance.
Available in 4 models, wide, mid, narrow and super tele, Mini TIU2 HD represents a breakthrough in CCTV. Mini TIU HD can be installed as part of a new or existing CCTV system and is compatible with all ancillary equipment including receivers, multiplexers and pan and tilt systems.
At a cost unheard of before now it is possible to install a high tech solution to the problem of true day night surveillance and is now available in a 9Hz version with greatly reduced licence restrictions.

**Applications:**

- Perimeter Surveillance
- Customs
- Border Control
- Law Enforcement
- Portable Crowd Surveillance
- Outdoor Event Security
- Diplomatic and VIP Security
- Port/Harbour Security

## Enhanced Thermal Sighting System

**High Sensitivity and Resolution** - the target detection, recognition and identification ranges are the highest possible to enable you to engage the target at operationally effective ranges. The unit, in its 384x288 pixel form, is 44% higher in performance than comparable US units.
**No Calibration Required** - the unique 'shutterless' design means that you never need to calibrate the unit ensuring that you never lose your vision... not even for a millisecond. In addition the advanced signal processing ensures that you never have the 'white out' condition characteristic of other microbolometer based imagers... regardless of how many rounds you fire.
Instant On - the eTSS switches on in just one second... regardless of the ambient temperature... ensuring that it is always ready for action when you need it.
**Flexible Configuration** - with three lens options and a choice of 384x288 or 640x480 pixels, the modular design of the eTSS enables it to be configured precisely to your operational needs.
**Additional Capability** - the eTSS is compatible with a semi-integrated eye-safe Laser Designator module enabling you to detect and designate a target. Later in the year a rangefinder option will also be available.
Long Operating Duration - the eTSS will operating for 6 hours on standard commercially available AA batteries. What's more, all of the batteries are inserted into the unit in the same orientation ensuring that, even in the dark, you can change batteries with confidence.
**Auto Covert** — a unique sensor detects when the display is being viewed and only switches on the display when you actually need to see an image. This function prolongs battery life and prevents stray light from the display being detected by your enemy.
**Easy To Operate** -

## TMP-H Series - Thermal imaging cameras

Portable thermal imaging cameras for security and law enforcement applications.
The TMP- H-Series are portable shock-resistant thermal imaging cameras. They produce a crisp image in the darkest of nights. Thanks to the TMP-H-Series, security professionals and law enforcement officers can see suspects in total darkness, through smoke, and light foliage.
The TMP-H-Series are excellent tools for walking patrols that need to secure industrial sites or borders, customs and law enforcement officers and all others that need to see what is happening in total darkness, in all weather conditions, without being seen themselves.

**Extremely affordable**
The TMP-H-Series are extremely affordable units. From now on, everyone can afford thermal night vision. Price is no longer an issue. There is no need anymore to use less effective night vision technologies.

**Crisp thermal images**
The TMP-H-Series produce thermal images of 320 x 240 pixels on which the smallest of details can be seen. Advanced internal camera software delivers a crisp image without the need for user adjustments.

## GSM CELLULARS PHONES DETECTORS

### GSM196 Mobile

- Detects both 2G & 3G mobile phones
- LED bargraph signal level indication
- Automatic display brightness control
- Advanced digital filtering for signal isolation
- Unique signal analysis for accurate detection
- Multiple range settings
- Cadenced vibration alert for ease of use

**Product Description**
With GSM phones getting ever smaller, they are increasingly being used in areas where they are forbidden. This technology is also becoming the preferred medium for bugs and other surveillance devices.
To combat these problems, use the multi-purpose GSM196 mobile phone detector.
Advanced band-selection filtering coupled to our unique signaldetection algorithms and easy-to-use displays gives unprecedented sensitivity and selectivity for this type of equipment.
The GSM196 can detect both 2G (GSM900 & GSM1800) and 3G (WCDMA / UMTS 2100) mobile phones. For situations where greater accuracy is required and / or specific monitoring is required in areas containing multiple phones, a specially designed directional antenna system can be used with the 196.
**Frequency bands**
The GSM196 is specifically engineered to monitor handset transmit frequencies only:
EGSM900 (880 – 915MHz) & GSM1800 (1710 – 1785 MHz)
W-CDMA / UMTS 2100 (1920 – 1980 MHz)

## TMP-918-196 – Sistema di Antenna Direzionale per GSM196

- Provides directional detection for 196 unit
- Operates over all G8M and UMT8 bands
- 9dBi forward gain enhances performance / range
- Can be used inverted on extension poles
- Handle accommodates a full range of DIY poles
- Lightweight design for prolonged use

The TMP-918 antenna system is designed to enhance the detection capabilities of the GSM196 mobile phone detector.
The lightweight assembly (approx 600grams) allows operators to more accurately pin point the location of an operational phone. The detection characteristics also allow the unit to reject unwanted signal reflections from other sources. The antenna effectively amplifies the signals being supplied to the 196 thereby increasing the range of the unit by as much as 50%.
The assembly can be used, either with the handle or mounted on the operator's forearm. When used on the forearm, a velcro strap is provided to ensure the safety of the assembly. For external searching the unit can be inverted and elevated by means of a variety of standard extension poles which can be fitted into the hollow handle.
The assembly also incorporates a standard camera fixing so that it can be attached to a normal photographic tripod.

**Use in prisons**

The TMP918-196 was designed specifically for use in prisons and can greatly increase the detection capability. In situations where multiple mobile phones are in operation on a wing at the same time, it can be difficult to identify the cell containing an active phone simply by using signal strength alone. The GSM196 when used with the TMP918 allows the officer to a scan specific direction with rejection of signals in all but the direction the antenna is pointing - see polar plots. The assembly can be mounted on the officer's forearm who can then simply walk passed cells on each landing /level. The GSM196 will then indicate which cell(s) have active phones in them.
Once activity has been detected on a wing the assembly can be setup to monitor specific parts of the wing from one end over a period of time.

## Phone calls recording and VoIP telephony System For inmates

The systems allows for the managing of the inmates phone calls through authomatic access to authorized personnel only, defininig and managing the timing determined by law and by the specific Administration.
It allows for real time monitoring , either by listening and through the display, of the telephone traffic in progress.
• Each call will be recorded in real time and in wav format and the listening will be possible from any location via remote Internet login password and encrypted VPN.
• The system is modular and applicable even for just a few lines of contemporary recording.

**OPERATING STRUCTURE**

The inmates to make phone calls must have cash on their account or into the account in the jail or it can be paied by the family. It must state the landline telephone numbers permitted (verified by the competent authorities) by the court.

**FEATURES OF THE SYSTEM FROM THE POINT OF VIEW OF THE INMATE**

The inmate will receive instructions in various languages accompanied by login and password and the list of approved phones and their timing. For example: number 1 the lawyer, n. 2 family home,n. 3 sister at home.
The prisoner shall type the desired number and the system automatically dials the phone number associated, thus starting the analysis of the allowed time. A warning message will be sent to the prisoner 2 minutes before the expiry of the allotted time.
During the call the prison police will listen, speak and decide to interrupt the communication. The data will not only be readily available in the database, but it will also be sent via e-mail for the listening from any location accompanied by a login authorization.

**FROM THE POINT OF VIEW OF THE PRISON ADMINISTRATION**

**Register loading**

The court or who is authorized by the server, can access from any location for data query, including recording listening. The system is controlled from any internet connection, with its password, and it is possible: access logs containing all the logs made, listen to the telephone calls, change the software and authorize people to access the web, ensuring a durable system (phone data backup and more).

## 3G, WI-FI IP TRANSMISSION SYSTEMS

### TMP-Box X2 Integrated Multiple Connection Cellular Router

The TMP-Box X2 is the first cellular router to establish two cellular Internet connections and utilize both for additional speed. These cellular connections are even maintained in moving vehicles.

**2x The Bandwidth and Coverage**

The TMP-Box X2's multiple connections provide broader data bandwidths either for large file transfers (as for media companies) or for a greater number of users (such as in buses and mass transport). Redundancy and a larger geographical area are provided by using two disparate carriers.

**Three Ways The TMP-Box X2 Can Be Used**

**Enhanced Speed for A Single Application**

The TMP-Box X2 will balance outgoing traffic over multiple cellular Internet connections to increase bandwidth.

Not all hardware or software will take advantage of both cellular Internet connections. Certain software and hardware will utilize both links for a single stream to essentially double the available bandwidth.

This solution is great for broadcast and media where upload bandwidth from the field is a must have!

### TMP-Box CM3 - Enterprise Cellular Router

**Available for CDMA or GSM 3G Networks**

- Broadband Speeds While in a Moving Vehicle
- Always-On Reliable Connection
- Supports Multiple Users & Devices Simultaneously
- Remote Management Software
- Easy-to-use web-based interface
- Remote Firmware Upgrades

**Technical Specifications**

- NAT (Network Address Translation)
- DHCP Server
- Port Forwarding
- IPsec VPN
- Supports VPN Pass-Through
- Dynamic DNS
- Connected Client Listings

**Wireless Security:**

- WPA (Wi-Fi Protected Access)
- 64/128-bit WEP Encryption

### TMP-Box X2 Slide - Double Your Mobile Cellular Broadband Connection Speed and Coverage Area

The TMP-Box X2 Slide is compatible with EVDO Rev.A and 7.2 Mbps HSPA networks. The TMPBox X2 Slide establishes two separate data connections, each with its own IP address, over the cellular network(s).

When both networks are available, the TMP-Box X2 Slide automatically resumes balancing data over both links. If one carrier is lost due to the coverage area, network outage, disaster, etc., the AirBox X2 Slide sends all traffic over the available link.

A separate data plan, antenna, and signal booster is required for each cellular connection.

**Product Features**

- Use Your Own Dual 3G Cellular Modems
  - Dual EV-DO Rev. A, Rev.0
  - Dual 7.2 HSPA
  - Hybrid EVDO & HSPA
- WiFi 802.11b/g Enabled
- Remote Management Capabilities
- Ruggedized Design
- Optional GPS Receiver for Fleet Tracking and Management
- Optional Cellular Signal Boosters for Increased Coverage in Remote Areas

**Available for CDMA and/or GSM 3G Networks**

### Water-Text - Through-Water and Through-Ground Radio Modem

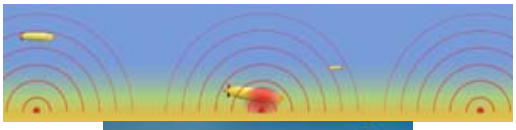
Water-Text is the world's first commercial through water and through-ground radio communication system, designed to interface with sensors and control units.

Water-Text can be readily tailored to numerous applications including: through water and through ground data transmission, underwater networking, AUV homing, underwater to UAV communications, test tank instrumentation and diver communications.

Delivering reliable communications under water is a challenge. We understand the challenges that operators face when designing and specifying systems for an operational scenario. The leading edge technology provides substantial operational and cost-effective solutions to the Defence & Homeland Security community.

Underwater communications from a variety of platforms, e.g. submarines, AUVs, remote sensors and instruments.
Enables seamless contact with assets on and above the surface.
Water-Text can also be used to set up underwater communication networks, of particular use in littoral or harbour waters.
Line of sight is not required and the signal will pass through sea walls.

## Water-Text - Through-Water Broadband Data Link

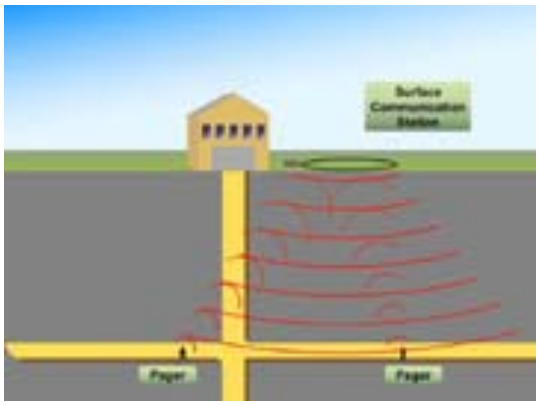


Water-Text uses the latest electromagnetic digital technology to enable high data rate transmission over a short range, through water and ground. Water-Text provides 2-way penetrating, wireless RF communications through seawater at higher data rates of 100 kbps (compressed video transmission). Applications include high speed data transfer between underwater sensors and unmanned underwater vehicles (ROVs, AUVs and HAUVs).

**TARGET APPLICATIONS**

- UUV to remote sensors
- UUV to UUV
- UUV to host platform
- Homing and docking
- Data collection
- Through bulkhead
- Test tank Communication
- Water-Text will support compressed video transmission

## Ground-Text - Through-Ground Radio Modem



Ground-Text is a through-ground Radio Modem that was developed from the Water-Text Underwater system.
Ground-Text has been optimised to operate 2-way through rock, soil, reinforced concrete and other solid materials. Ground-Text can be readily tailored to a variety of applications.
MEETING THE CHALLENGES OF WIRELESS COMMUNICATION
We understand the challenges that operators face when designing and specifying systems for an operational scenario. This leading edge technology provides substantial operational and cost-effective solutions to the Defence & Homeland Security community.

**FEATURES**

- Transceiver
- Fast propagation
- Can be connected in a network
- Shorter download times
- GSM option

**BENEFITS**

- Two way communications
- Can be interfaced to text entry terminal for comms link
- Reduction in Doppler shift
- Extended coverage
- Global access

## Ground-Tooth - Through-Ground Broadband Data Link

Ground-Tooth uses the latest electromagnetic digital technology to enable high data rate transmission over a short range, through ground, soil and concrete.
When combined with a video system, Ground-Tooth can be used as a communications aid in caves, tunnels, buildings and for disaster recovery.

**TARGET APPLICATIONS**

- Two way wireless, high data rate transfer through rock, soil or walls
- High speed secure wireless network through thick walls where wires are not an option
- Real time video streaming for covert surveillance

**FEATURES**

- Crosses through rock, soil and concrete
- High data transfer rate
- Transceiver
- Shorter download times
- Immunity to multi-pathing

**BENEFITS**

- Wireless
- Unobtrusive
- Covert
- Reduced operating time
- Reduced operating costs
- Fast access to data
- Fast and secure networking capabilities
- Can stream video
- Two way communications
- Reduced power consumption
- Simple to operate.

## RoIP COMMUNICATION SYSTEMS

### TMP-223 Radio Dispatch & Signaling Equipment

Flexible, reliable Dual IP Remote Adapter Panel connects C-6200 IP console or C-Soft Windows console by WAN connection and offers numerous dispatch configurations in a variety of modes.
The TMP-223 remote adapter provides a reliable means of remotely controlling up to two, two-way radio base stations.
The adapter interconnects to C-6200 IP console or the C-Soft Windows console by means of any available Wide Area Network (WAN) connection, including wireless. Now, the TMP-223 can be optionally compatible with Tetra radio systems, commonly found throughout the world. It is also capable of decoding 5/6 tone signaling. Dispatchers can use the adapter in up to six different ways:

- In the local mode, the radio connects directly to the TMP-223.
- The tone mode generates the keytones required to control any tone-equipped radio circuit.
- The console mode uses existing tones, decoding Ethernet traffic for the console to play.
- In the crosspatch mode, mobile dispatchers can communicate with another user within the radio system.
- With the PIB-223 to connect POTS line to dispatch network
- With the NI-223 to connect iDEN phone to the dispatch network

## ROBOTS

### ART-Robot for Bomb-squads

The ART-Robot B.I. model explosives disposal robot comprises two basic parts:

- The robot itself.
- A control console. The control console is used to operate the robot and has a TFT screen to display the images from the robot's cameras, showing the real positions of its arms at all times.

Various screens can be used to see the images from different locations so that the operators in different positions can share robot control.
Both parts are self-contained. Communication between the two is by encrypted wireless transmission at 2.4 GHz with a bandwidth of 11 Mbps. If there are problems with the wireless transmission, they can be connected together by cable.

**The ART-robot has:**

- Support for a shotgun and water jets.
- Battery charger.
- Aluminium cables drum (100 metres of cable) with a mercury contact rotor.

The robot can be described in various sections:

1. The moving of the robot itself.
2. The movement of the arms.
3. The image and sound system.
4. The control electronics.
5. The robot's general systems

**Total width: 670 mm**
**Total weight (estimated): 410 kg**

| | |
|---|---|
| | Support for four arms of 3 mm thick<br>ST52 steel (used for vehicle armour).<br>Arm lengths ranging between:<br>• 1,120 mm<br>• 685 mm<br>• 760 mm<br>• 560 mm<br>**Box measurements**<br>• Length: 1,600 mm<br>• Width: 470 mm<br>• Height: 450 mm<br>• Floor clearance: 100 mm |
| | |
| **New Bot**<br> | |
| | |
| **Mini-robot Colby for Bomb-squads**<br> | The Colby VideoGrenade is 3" (7,62 cm) in diameter and 18.5" (47 cm) long with a 5" (12,7 cm) wheel at each end. It weighs 8.5 lbs (3.85 Kg.)<br>It has a built-in video camera with an IR illuminator.<br>It also has a microphone to pick up and transmit sounds It transmits audio and video on 2.4 GHz back to a pocket sized monitor with a 3" LCD screen that is mounted on a hand held controller that enables the unit to be spun 360 degrees or driven to another position or the next room.<br><br>The heavy weights in the center of the wheels provide good mass to be able to throw the unit through a window, breaking the glass.<br><br>The unit the falls to the floor and self rights itself, sending back audio and video of what is going on in the room where the possible bad guys are. |
| | |

## TMP-RiotBot - The first robot for riot control

**Specially engineered for personnel engaged on disturbances, prisons riots and SWAT squads.**

The new TMP-RiotBot is an advanced security robot especially designed for interventions In areas with a high degree of conflict and where the resulting conditions are not conducive to first person direct and frontal of the personnel.

TMP-RiotBot employs a Pepperball TAC-700 carbine customized and adapted for safe use in the robot. It averages 700 rounds per minute and has a total capacity of 450 PAVA balls, a non-lethal ammunition. This carbine can only be shot using a remote control, which makes it impossible for unauthorized people to use it.

It can continuously operate alone or over two hours. Furthermore, the compressed air recharging, the replacement of batteries and the reloading of ammunition can all be done in less than five minutes.

TMP-RiotBot has a totally ergonomic, light-weight remote control that controls the robot's movement, and vertical and horizontal position of the gun turret that is mounted and shot from the carbine. The system can be operated either through direct viewing or through incorporated video equipment.

With a speed of over 12 miles/hour and a weight of less than 40 pounds, it can be deployed and used quickly and safely by one operator at distances of over 1 mile.

**General**

- Length: 24.6 in. (625 mm)
- Width: 18,8 in (4775 mm)
- Height: 24 in, (609 mm)
- Weight: 40 lb. (18 kg.)
- Speed: Up to 12Mph (20 km/h)
- Engine: 6x6 drive wheeled
- Zero turn radio

**Camera**

- Mounted camera on weapon
- Day-night high resolution colour camera
- Image 5ensor CCD
- (Other cameras available)

## TMP-Viper EOD Vehicle

**Applications:**

- Explosive ordnance disposal
- X-ray viewing
- Surveillance
- Communication center/radio stations

TMP-VIPER EOD VAN is designed and prepared to meet the requirement for EOD Squad's daily routine Bomb Disposal tasks.

The whole package complies with UK Military EOD Standard, and contains 11 following bomb disposal tools:

- TMP-V5000 High Power DDS Programmable Convoy Jamming System
- TMP-105EOD Portable Jamming System (220W or 300W)
- TMP-EODROB II EOD Robot
- TMP-S209 Bomb Suit
- TMP-9 Bomb Container / Bomb Blanket
- TMP-5200 Portable X-Ray Scanner
- Explosive Material Detector
- Explosive Device Transfer Tool
- N-37 Telescopic Manipulator
- Non-Magnetic Tool Kit
- ZTS-38 EOD Water Jet Disrupter

Surveillance Monitoring System and Communication Command Center can be installed as customer's requirements.

## TMP MK-5 Robot

Small and durable, this robot is very maneuverable in small, awkward spaces. Its five degrees-of-freedom arm enables delicate movement for the most intricate tasks. The TMP MK-5 uses an advanced remote control systems. The TMP MK-5 uses an advanced remote control systems which have been proven by leading police and law enforcement to work under the harshest operational conditions. The Hornet is extremely versatile and supports a broad range of attachments.

**Applications**

- Climbs stairs
- Navigates under cars
- Rolls through aircraft and offices
- Remotely detonates charges
- Fires shotguns through car windows

**Key Features & Capabilities**

- Easily transportable in car or light truck, or carried by two people
- Delicate movement for the most intricate tasks
- Two color cameras
- Proportional driving control
- 360 degree pivot turning
- Maneuverable and easy to operate
- Maximum operating range of 285 meters (approximately 850 feet)
- Operates continuously for two hours without recharging
- Recharges with standard socket or car recharger
- Supports a broad array of attachments, including shotgun, laser designator, disrupter, microphone, megaphone, cell phone, x-ray and other detectors

**Dimensions**

- Length (Arm Folded) – 37 in (94cm)
- Width – 24 in (60 cm)
- Weight – 218 lb (100kg)

## TMP-EODROB II

TMP-EODROB II has been used by US military in Afghanistan during action against the Taliban and Osama bin Laden. TMP-EODROB II was on the ground in Kuwait when coalition forces massed in 2003 and have been in Iraq ever since performing EOD/IED (improvised explosive device) missions.

**Features of TMP-EODROB II**

- Small size can be applied in narrow places such as the meeting room, lane, airplane, etc.
- Size: 900X400X600mm
- Weight: 50kg
- Flexbile movement: top speed 90m/minute.
- Integrated with 3 sets of CCD camera, one of which is 10X optical zoom.
- Carbon fiber manipulator, reach for 1.5m long. Handle objects in different shapes well.
- Equipped with light facilities, can be operated during daytime and night. Both-way communication system makes it easy to exchange information.
- Various optional accessories: camera, walkie-talkie, anti-explosive bomb launcher, X-ray detector, DU Detector, shot gun, Ridhomnd water gun (standard),additional lamp, etc.
- Modular designed. All parts can be separated in very short time.
- Quick - Charge batteries can be exchanged within 1 min.

| | |
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| **SIM-Racar-Lambda - Tactical Bulletproof Surveillance Robot**<br> | Tactical robotic system designed to help first responders make informed decisions from a safe distance.<br>The SIM Racar system with its UGV of model Lambda has enough space to carry electronic reconnaissance equipment and can be used as platform for weapons or other tactical equipment.<br>SIM RACAR-Lambda can be equipped with up to 2 internal cameras as well as multiple external cameras providing fullmotion video, which is transmitted by a digital COFDM – system (SIM MILAN-Lite) from the robot to the handheld Operator Control Unit (OCU).<br><br>The OCU's simple joystick operation gives the operator complete control over the vehicle movement.<br>In addition, bi-directional data communication allows the operator to remotely view sensor information from the payload.<br>All of these features, coupled with a wide range of payloads and accessories, converts this versatile vehicle into a mission specific tool.<br><br>1. Unlimited all-terrain capability, for outdoor or indoor operations<br>2. Fast and highly maneuverable<br>3. Robust chassis, proof against mechanical tampering<br>4. Ballistic and blast protection<br>5. Long operation range and mission time<br>6. Easy to operate, easy to maintain<br>7. Provides enough space to carry electronic reconnaissance equipment<br>8. Can serve as platform for weapons or other tactical equipment.<br>9. Easy to use |

| **ROBOTIC UNDERWATER SYSTEMS** | |
|---|---|
| **Prometeo - Robotic Underwater System**<br> <br>Rotating camera | **Reliable, light ROV construction** with powerful thrusters allows operation in currents up to a depth of 1200 feet<br>**Thin, Kevlar reinforced coaxial cable with little current drag**<br>for the transmission of all signals including power supply, neutrally buoyanced<br>**Mushroom shape and a low center of gravity**<br>for perfect video images due to unique navigational stability<br>**Open frame construction**<br>allows a quick exchange of components for different operations<br>**Custom designed**<br>for the best adaptation to the needs of every customer<br>**Performance**<br>Four speeds for the horizontal propulsion, four for the vertical with ten possible combinations of thrust between the motors offer the operator manoeuverability beyond comparison with an intuitive approach to simple and functional controls placed on a fiberglass enclosure. Safe and well insulated, it allows to be used with wet hands.<br>The main purpose of a R.O.V. is to provide impeccable images in the ever changing environmental conditions. The images are the only comparison that allows for a sense of perception and space in the environment where the operator interacts with the vehicle. The electronic structure of Prometeo fulfills this purpose; in fact, it mounts, positioned in the fulcrum of the horizontal thrust , a high quality video camera with grand angular lens that provides for a field view of 80 degrees allowing for a good peripheral vision , even in murky waters. Two 50 watt halogen spotlights with a field of 60 degrees can handle perfectly the view taken by a camera with a better sensibility of 0.5 lux. A fair compromise between the power of the spotlights and the sensibility of the camera prevent the `fog effect' caused by the suspended particles directly in front of the lens, typical of systems of higher illuminating power. |

## UAV – UNMANNED AERIAL VEHICLES

### UAV - Unmanned aerial vehicles

UAV helicopters are among the most innovative products currently on the military and security market. Security forces, armies, coastal guards and fire brigades in various countries are already widely using them given that these vehicles undoubtedly represent an alternative to traditional helicopters which is both financially convenient and professionally accurate.

Their main characteristic is their autonomous flight. All functions are carried out thanks to pre-programmed instructions sent by an on-board computer, not by a pilot.
A UAV helicopter can also be remotely run by a non-expert operator. The on-board computer interprets all commands thus rectifying any mistakes and guaranteeing all functions are accurately carried out.
UAV helicopters can carry out flight missions in a completely autonomous mode following a timeframe which is preestablished and pre-programmed on the on-board computer.

These are some of the many military and civil applications a UAV can be used for:

- Coast, border and national parks surveillance
- Automatic surveillance and patrolling of pre-defined areas
- Traffic surveillance
- Detection of chemical, radioactive or explosive substances
- Gas pipes, electric lines surveillance
- Crime surveillance
- Radio signals relay
- Hostage search
- Riots and crowd surveillance
- Delivery of goods in life-threatening situations
- Fishing surveillance
- Fire surveillance
- Rescue
- Escorting of military convoys

UAVs can take high-resolution and hyperspectral photographic images and can be equipped with various types of cameras: day camera, thermal camera, infrared or ultraviolet cameras. The resulting images (e.g. tridimensional land mapping) are highly precise.

Various sensors and electric devices can be mounted on a UAV, weight being the only limitation.
UAVs can also be the ideal solution to verify the authenticity of some rescue calls without wasting human resources and therefore simplifying operational dynamics.
The precision and reliability of the data/images obtained via a UAV is undeniable. All this proves UAVs to be highly sophisticated, safe, innovative and financially convenient.

***TMP-200 – 25kg - Rapace***

***TMP-100 – 10kg - Corvo***

***TMP-20– 7kg - Butterfly***

### Colibri 21 – Mini Helicopter

**Military Operational**

- LRRP “Long Range Recognize Patrol” Patrols:
- Special Forces Airborne Paratroopers Patrols;
- Infantry and Cavalry Patrols;
- RSTA Units Patrols;
- Terrestrial Artillery Advanced Observatory and MLRS ;
- Infantry Advanced Observatories “Mortars”;
- Engineer Units ACRT;
- Anphibious Brigade landing units and Patrols;
- Aviation Special Units and Patrols.

**PARAMILITARY OPERATIONAL**

- Police and Police Forces terrritory monitoring;
- Illegal immigration control by the Custom Office ;
- Border Control or Control Zones of Custom Office;
- Police Force battalion for kidnapping research;
- Coast Guard control;
- Government Forest Ranger counter-tresspassing Units;
- Govermental Forest Ranger Units fighting the building without planning permission ;

| | |
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| | • NBC Units and Fire Fighters emergencies ;<br>• Defense and Civil Protection Units.<br>The characteristics use of support to National and local institutions, Civilians Company of the **Colibrì21 system** for the territorial monitoring of:<br>• Environment Regional Agencies (ARPA);<br>• Public disasters;<br>• Aqueducts control ;<br>• Electric lines control "Power ducts";<br>• Gas ducts control ;<br>• Oil ducts control ;<br>• Agricultural borders control;<br>• Cadastre and Council's restrictions;<br>• Road situation and traffic control. |
| | |
| **Micro-B – Mini airplane with fixed wing, weight aprox 2kg.**<br> <br> | **UAVS miniairplane** weigths 1Kg only, but is provided with unpreceeding exceptional abilities in comparison with the small size and low cost. It is the smallest UAV all over the world, with cutting-edge stabilized cameras, designed to provide high quality ISR (Intelligence, Surveillance and Reconnaissance) and high resolution images.<br>It is fully autonomous, reliable for clandestine operations, easy to use, all in a small and inexpesive platform. It can be started in a few seconds even in a crowded urban environment, and provides up to 1 h real time visual information in difficult situations.<br>With its small size and rapid deployement allows for visual recognition of items in real time to acquire situation awareness and gain dominance in any tactical circumstance.<br>Featuring unprecedented advantages that cannot be found in any UAV on the market:<br>• Costs reduction : cost effective solution<br>• High payload capacity: can carry an additional load of 200 gr<br>• Full authonomy : totally independent from the start to the recovery<br>• Small size, low weight: transportable in a case<br>• Usable anywhere: it can be started in limited urban areas.<br>• High reliability: the entire avionics on a single card with a double command link<br>• Fast deployement: assembled from the box in only 60 seconds<br>• No terrain restriction: starts on any terrain,even from a window<br>• Low acustic and visual signature: Not detectable at 200m altitude<br>• Modular composition: fast components replacement without any additional tool<br>• Durable backpack for transportation: easy transport<br>**Unique characteristics:**<br>• Foldable dual-use, lightweight catapult: allows for the manual launching start.<br>• Stabilized video image: unique patented solution for a light stabilized image<br>• High resolution images: internally stored during the flight<br>• Automatic tracking of moving targets: video sighting and stand- alone camera guide<br>• Ground Exploitation System: advanced real time system totally compatible with all systems |
| | |

## SIM-SkyEye 4-200 & XT- Unmanned Air Vehicle

SIM-SkyEyes are miniaturized ATOL- aircrafts (ATOL = Autonomous Take Off and Landing). They can operate remote controlled or fully autonomous by GPS waypoint navigation.
Thanks to our unique AAHRS (AAHRS = Attitude, Altitude & Heading Reference System) even un experienced operators are able to fly these machines within one hour!
With high efficient propulsion the noise emission is very low (< 65 dBA hoverpoint, 3 meter distance]).
With the pilot wearing the optional video glasses, the operating range can be far out of direct sight (up to 500 meters / 1500 feet).
Depending on payload and temperature the flight duration is up to 20 min.
SIM-SkyEye is a micro UAV developed a wide range of uses and applications:

**Users:**

- Photographers
- Journalists
- TV
- Police
- Army
- Firebrigade
- Security companies
- Enviromental protection
- Weather service

**Possible applications are:**

- Documentation
- Coordination
- Observation
- Communication
- (and everything you can imagine...)

## Libellula 21 – UAV Helicopter

**Libellula 21** is a helicopter; the rotor can produce force upward in the air and relative air.
Rotor is controlled by the automatic tilt which can make the helicopter producing the force of forward, backward, left or right, so the helicopter can do:

- Vertical upward or downward, air hovering, in situ turning around and it can fly forward, fly after and fly side;
- It can make a long time hovering and fly closely to the ground. It can also use the terrain and surface features for hidden flight;
- It does not need a special runway for vertical taking off and landing in the field.
- If the engine failure in the air, a helicopter can use the rotor rotation to land safely.

In addition, Libellula 21 unmanned helicopter has characteristics of low-speed flight and flexibility. It has a unique advantage that it can be widely used for artillery firing exercises, the army intelligence reconnaissance and battlefield surveillance and naval short-range maritime surveillance (including monitoring the water and underwater's target) and so on.

- Wingspan radius:1760mm
- Body lengtht: 1570mm
- Load: 3000g
- Take-off gross weight: 8000g
- Cruising speed: 30 ~ 50km/h
- Flying height: 10-1000m
- Endurance: 15 ~ 45 min (electric engine) / 120 min (gas engine)
- Maximum wind: 4
- Landing: vertical take-off and landing

## TMP – Clair Small electrically powered UAV

TMP-Clair UAV is an small electrically powered UAV and it is to be used in Short-range surveillance. It plays an important role in reconnaissance and aerial photography equipped with webcam, digital camera and microwave devices. It is compact, light weight, and it is also easy to operate and maintain. During flight operation, it can fly according to the scheduled routes and the adjustable waypoints.
Data and images can be transmitted at the same time. Horizontal resolution of the webcam: 420 TV lines.
Effective communication distance: 20km. It is a tactical reconnaissance UAV with national advanced level which recently launched by our company.

- Wingspan: 1100mm
- Body length: 900mm
- Load: 200g
- Take-off gross weight: 2200g
- Maximum thrust: 1350g
- Cruising speed: 40-60km/h
- Flying height: 20-2000m
- Endurance: 20-50min

| | |
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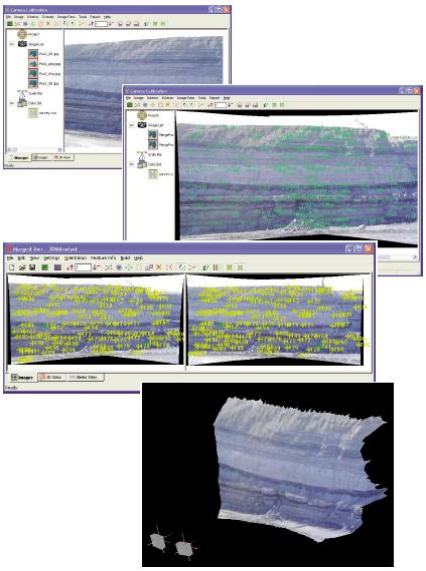
| | ➢ Maximum wind: 4<br>➢ Landing: hand rolls |
| | |
| **TMP-Cloud3 Micro UAV**<br> | TMP-Cloud3 Micro UAV is a kind of air robot with fixed wings. It's less than 5kg. It refers to most key technology about micro systems, so it belongs to micro UAV. Including a lot of subsystems, such as electric aerocraft, GPS navigation autonomous flight autopilot, video microwave transmission, link- control and so on.<br>The airframe of TMP-Cloud3 is made up of the compound of PVC and EPS, which is light weight, strong intensity, not reflecting Hertzian waves, good performance of resistance to impact. The main wings of aircraft are in concavo-convex type. The dynamic load of UAV is big, which makes good volplane capability. The airframe combined with cabin and haulm. The controller of "flight level" and "turn up and down" are set at the botton of the haum, which makes control rather sensitive and convinient to regulate. Cabin is at the barycenter of the airframe, with large cubage to place different facilities. Single wing structure is designed on the high platform, which ensures security and stability well.<br>➢ Wingspan:1120mm<br>➢ Body length: 970mm<br>➢ Load: 200g<br>➢ Take-off gross weight: 1500g<br>➢ Maximum thrust: 900g<br>➢ Cruising speed: 25-45 km/h<br>➢ Flying height: 20-1500m<br>➢ Endurance: 20-50min<br>➢ Maximum wind: 4<br>➢ Landing: hand rolls |

| | |
|---|---|
| **DATA ANALYSIS SYSTEMS FROM UAV AND AERIAL RECORDINGS** | |
| **3DMAnalyst**<br>***Software & CalibCam***<br>  | 3DM Analyst is a rapid 3D data extraction package for use with digital imagery. The software uses pairs of aerial or terrestrial digital images that can be obtained either from digital cameras or scanned images.<br>3DM Analyst offers advanced functionality for model orientations, using any combination of control points and camera stations and also allows the use of natural tie points as additional input to enhance orientations.<br>**Features**:<br>• Supports digital cameras and scanned images in BMP, PNG, TIFF, TGA, and JPG image formats.<br>• Built-in support for calibrating digital cameras.<br>• Customized orientation routines especially designed for difficult terrestrial models.<br>• Optional Least-Squares Matching for all digitized data and centroiding of circular targets to improve accuracy.<br>• Enhanced automatic DTM generation algorithm with user-controllable density and correlation criteria.<br>• Automatic contour and cross-section generation.<br>• Support for up to 50,000 user-defined feature types arranged in a logical hierarchy.<br>• Support for breaklines, areas, and holes to control DTM generation and TIN formation.<br>• Three distinct views for digitizing and processing data to suit the user's preference:<br>  ○ Images View, with both images shown side-by-side, featuring the Single Image DigitisingTool that allows data to be digitized in one image while the software locates the corresponding point in the other image.<br>  ○ 3D View, with all data shown in 3D for full 360 degree viewing, featuring 3D texture mapped models.<br>  ○ Stereo View, with images and data shown in stereo to allow true depth perception. Supports a wide range of industry-standard stereo hardware as well as the range of handwheels and footdisks.<br>• DXF import and export ability for compatibility with most mine management tools.<br>• 3D image export ability for compatibility with Vulcan and other products supporting this format.<br>• User-friendly project wizard to guide in the project creation process. |
| | |
| **HYPERSPECTRAL RESEARCH CAMERA** | **Developing hyperspectral imaging applications in following areas:**<br>• Precision farming<br>• Medical research, ophthalmology, dermatology<br>• Resource management<br>• Food safety & quality |

- Forensics, criminal, art, material engineering
- Gemology
- Military

**Hyperspectral R SERIES**

The 100R Product Line is the newest in a series of sensors that uses a convex grating reflective spectrograph design.
The 100R Series now gives our customer base a choice between transmissive and reflective systems.
The 100R Series also incorporates a patented line scanning technique (U.S. Patent No. 6,166,373) that requires no relative movement between the target and the sensor.
VNIR-HW
UV (200 - 400 nm) / VNIR (400 - 1000 nm) / SWIR (900 - 1700 nm & 1000 - 2500 nm)

**Hyperspectral T SERIES**

The 100T Product line is our first hyperspectral product in a series of sensors that will span the spectrum from ultraviolet to the infrared. The 100T measures the intensity of reflected energy from any given target at hundreds of narrow wavelengths and stores that information in a digital image format, called a hyperspectral image. Each image contains a complete reflectance spectrum from a given range (UV/VNIR/SWIR) of nanometers for every picture element in the image.

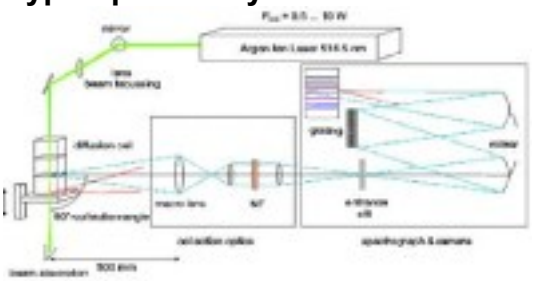
## Digital audio/video recorder with monitor of 8,2”

**Specifications:**

- **Input:**
  - Video mixed Standard (1Vpp 75 Ω)
  - RS-232 for the planning and recording
  - Audio
- **Output:**
  - Video mixed Standard (1Vpp 75 Ω)
  - Audio
  - USB for the connection to the PC as external hard drive (max. 150Gb)
- **Alimentation:** 12 V interior by battery polymeric lithium rechargeable which allows a standing of 2 hours of continue working. Possibility of external alimentation..
- **Types of files recorded:**
  - .MOV (Quicktime) with FAT 32 formatting of hard drive;
  - .FFV (File Proprietary)
- **Management software:** gives the opportunity to chose different types of files compression.
- Compressed Kit of cables (video, USB, RS-232), power supply

## HYPERSPECTRAL RESEARCH SYSTEMS

## Hyperspectral Systems – Software



**TMP-HSPS** is a software based on a GUI package which enables the user to comunicate and control the product line. Designed for the 2000 and WinXP platforms, converts scanned images obtained by our TMP-HSP system in a single format which contains spatial and spectral information for each image element. A number of pre-processed routines can be then directed by these hyperspectral images, and finally placed on the left of the image processing off-the-shelf package. The software provides user-friendly tools as: live preview, escape function in the scanning, geometry control, camera control, real time viewing during the acquisition, image display, images information retrieval, radiometric calibration, interference removal, images statistics, properties pixel tools, built-in saturation control, group processing, ENVI creation.

## Hyperspectral systems - UAV applications and remote-sensing

**UAV (Unmanned Airborne Vehicle)** provides capacity of remote sensing applications. The TMP-HSP system can be mounted on a UAV, and shows through a window a real time image of the targeted area below. This paves the way for applications such as:

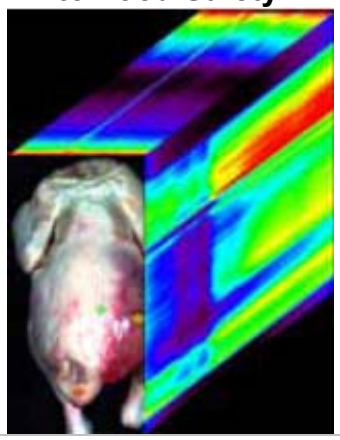
- Identification and trackin of targets on the ground
- Discovery and description of drugs lab
- Investigations in areas suspected for illegal substances traffic
- Mines Research and identification at land and in the sea

**CAMOUFLAGE**

The emission spectral content of an object can often give more information about its nature than its visual image can do being susceptible of alteration due to disguises and camouflages. The spectral signs can reveal the position of an object, hours after the last move and track it through the thermal trace left on the terrain. The spectral signs are also in the ocean and can be used for the objects detection in shallow waters. A hyperspectral sensor cans simoultaneosly measure hundreds of spectral lines, often in a single spectral band. The relevant

strength of each line leaves a unique trace of the emitting object. Furthermore, the ability to perceive a treat using multiple modes can potentially reduce the false alarm rate.
Hyperspectral imaging covers a band of most alectromagnetic spectrum and therefore reveals details that would not be distinguishable by simply examining the visible part of the spectrum. Camouflaged objects on one side of the spectrum might not be on the other side; for example, an entrance to a tunnel hidden by foliage may not be evident in other image types , but could be detected in a hyperspectral image; the same image may also make a distinction between the electromagnetic spectrum reflected by the leaves covering the entrance and that of the leaves covering the rock.

## Hyperspectral systems - Solutions to Food Safety



**TMP-HSP** revoluzionizes the food control process allowing the operator to distinguish between safe and unsafe products, in areas of safe handling, production, processing and control of food provisions.

**Areas which woulld benefit the most from an accurate control are**: raw poultry – fruits/vegetables, wheat and rice, dietary supplements, biological food and buffet food. **TMP-HSP** also helps for the detection, identification and separation of contamined food. The system can detect spectral traces of: dirt, fungi, excremental material, indigested food, and bacterial pathogens agents (Salmonella, Escherichia Coli O157:H7 (E. Coli)). It will result in a lower detection time, determining a unique spectrum for different bacteria types, with much more accurate results compared to that of conventional systems. The system is capable of rel time monitoring of large amounts of food, so the operator will obtain immediate feedback. Also the identification, removal, and carcass clearing reduce the cross-contamination during the production process.
All the Hyperspectral Imaging systems contain at least one device that is used to determine the food contamination, such as animal carcasses. Image processing algorithms allows for the contaminants identification.

## Hyperspectral Systems – Seismic Vulnerability

The system can be used in a variety of applications. Projects include assessment of seismic vulnerability of the main bridge structures (included Golden Gate and San Francisco-Oakland Bay), the structural integrity of containers for nuclear material and the possible damage that would be caused by a natural gas-tank explosion in a suburban environment.
The system has been used in a nuclear test, as part of routine maintainance tool, to determine points of wear in the tanks to anticipate any future accident.

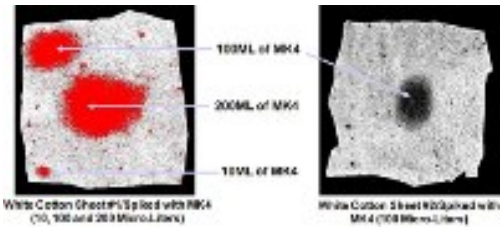
Several organizations as the USGS, Government Agenzie and Research Organizations have collected data on a wide variety of substances.This information is available to anyone and can be downloaded from the web. The system works on a data scanning and collecting system to be added to the collection which will be available for sale. In addition, it has collected a large number of spectral signatures that allow the system to distinguish the desired substances from background information, providing commercially useful information to the customer.

## Hyperspectral systems - Control and identification of documents, currency, etc

**RESEARCH OF ORGANIC AND INORGANIC EVIDENCES AND FORGED DOCUMENTS IDENTIFICATION**

The results of these experiments show that a forged passport can be distinguished from an authentic one, on the basis of the spectral characteristics. Furthermore, the document conditions (ex. new,old, wore) do not seam having an appreciable effect on the the range generated by the hyperspectral camera. There was almost no change in range for a given year, a significant amount of variations could be noted from year to year.
These proof-of-concept experiments indicate that this technique can be useful for the development of an automated method for passports in addition to that of the Customs personnel . The data consistency from year to year allows a fairly accurate comparison of an unknown passport with a catalog range. The data variations along the year measured in these experiments implys that the catalog range is necessary for each year of issuance. However, this requires a minimal extra work during the development of the catalog and would be virtually invisible to the end user.

## Hyperspectral Systems – Crime Investigations



The **hyperspectral camera** has proven to be a valuable resource for crime investigation. The areas which ultimately benefit from the detailed hyperspectral examination are:

- Investigative guide for a given case. An example is the identification of a typical vehicle in a hit-by case examination of paint and glass.
- Connect a crime scene or a victim to a suspect. This connection can be provided through the examination of differrent types of physical evidences such as hair, blood, semen, fingerprints.
- Confirmation or rejection of an alibi or statement of a suspect. In case of a sudden fatal gunshot, the exam of the blood stains layout on the scene and on the clothing may determine wether the victim strugged with the aggressor or, conversely, was in quite reverse position. Questions , like wether could the fatal shot have been fired by the victim or if the blood stains were his work, can be answered by the assessment of physical elements.
- Suspect identification. The identification of a suspect is not only restricted to this but is often determined through fingerprints or DNA testing.
- Induce a suspect to confess. In some cases, factual information of a suspected provided by an examination of physical evidence, such as the identification of the victim's blood on clothing or fingerprints on weapons, lead the person to confess involvement in a crime.
- Innocent exsemption. Can also be found physical evidences proving the innocence of a person. This is often referred to exculpatory evidence. An example of these evidence type could be the presence of DNA in the body fluids.

## OPTICAL ZOOM LENS FOR CAMERAS

### TMP-CATS2000 - IR 100X Motorized Zoom Lens

**Internal focusing system**
The seven lenses of the first focus lens group are separated into groups of four and three lenses which provides for rapid and accurate focussing on an object. As the front lens does not rotate, a polarizing filter can be used.

**Internal 2X Magnifier (Extender)**
This lens provides for focal lenght from 1000 mm to 2000 mm which ca be operated remotely.
Thus an image can be instantly expanded to 2X.

**Day and Night Applications**
The focal point remains almost constant under visible ray or 400nm to the near infrared ray of 900nm (IR) and within the focus area of 10mm - 1000mm. Across this range readjustment of focus should not be necessary. Additionally, when using the 2X extender, lens back adjustment is not necessary as the focus point of IR light and visible light are the same at the wide end. Focussing will be required under IR light for focal lengths of 70 ~ 450mm.
For the ranges of 20 ~ 70mm and 450 ~ 2000mm focussing is not necessary.

### TMP-CATS400 - IR Corrected D/N Motorized Zoom Lens

**1/2" C 10-400mm F4.5**

Format: ½"
Mount: C Mount
Focal Lenght: 10 – 400 mm
Zoom Ratio: 40x
Iris Range: F4.5 - 360

## TMP-CATS300 - IR 30X Motorized Zoom Lens

**10 – 300 mm F2.8**

At 300 mm Focal Length, Chromatic Aberration.
Through 400NM to 1000NM, is Small Enough for 24-hour
High-Class Surveillance by Day-And-Night Camera.

- The smaller size of the 30X zoom lens (105.0W x 92.0H x 221.5L, weight: 1950 g) provides:
  - a simple control system
  - cost reductions
  - 24-hour surveillance without a watchman
- High resolution,high contrast.
- Long-distance 24-hour Surveillance

**Uses:**

- BORDERS - COASTS - OCEANS - AIR PORTS - POWER STATIONS
- FORESTS - RIVERS - DAMS - VOLCANIC ACTIVITYS - ROADS
- HALLS - CULTURAL HERITAGE SITES - PUBLIC FACILITI ES
- NIGHT-TIME SAILINGS, ETC

## TMP-Shoot100 - Amazing 50X Motorized Zoom Lens

Motorized Zoom Lens is one of the most complicated products among various kind of optical products.
While having been engaged in development and manufacture of zoom lenses for the broadcasting services, FIELDMARSHAL has tried to establish an essential method in the approach for developing optical products, which is neither based on superficially clever style nor aiming at easily achieved mass-production. In doing so, FIELDMARSHAL has worked hard for cultivating the most refined techniques and has accumulated a vast amount of valuable know-how in this area.

The surveying activity using long focaldistance lens is not an application that is very special in nature for sophisticated surveillance and border patrol but one that is widely used in the whole world. From such an analysis, FIELDMARSHAL set out the aim of producing a "standard" lens for the long focal-distance surveillance application by ourselves. The goal was to offer it to the users to allow them to build the surveying system at a more reasonable cost. FIELDMARSHAL has now succeeded to develop this lens, which has literally accomplished this purpose.

High magnification and long focal length
TMP-SHOT 100 features high magnification of 50X and long focal length of 1000mm at telephoto(2X Ext.) with compact body of 124(W)"x 108(H) x 300(L)mm and light weight of 3.2kg.
These featurs offer outstanding advantages to your applications.

## Infra-red corrected zoom lens

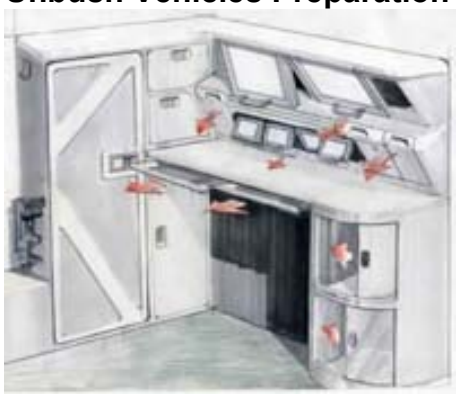
**MOTORISED ZOOM LENS - TMP-18Z86R Infrared corrected zoom lens 8.6-154mm f/2.5 *IR***
The advanced optical design of the TMP-18Z86R 18X infrared corrected zoom lens, offers perfect correction of color aberration. To achieve this, FIELDMARSHAL designed special infrared multicoated optical glass. This affects a wide range, from the visible light to the near infrared, something almost impossible to achieve with conventional methods.
The newly developed CCTV zoom lens gives you a clear, in-focus, picture at all times, 24-hours a day.

**Clear 24h image monitoring**
Recent technological progress in CCTV cameras produces "Day/Night or High Sensitivity HAD Cameras". This makes it possible to offer daytime monitoring in color and night time monitoring in black and white. It also allows monitoring in total darkness when using infrared illumination.But conventional CCTV lenses cannot focus completely in the infrared area; this results in a delay of the advance of camera technology.

That's why FIELDMARSHAL has developed the totally new TMP-18Z86R, a CCTV lens perfect to work with Day/Night or High Sensitivity HAD cameras. Using a surveillance system that combines the TMP-18Z86R zoom lens with Day/Night Cameras eliminates the need to re-adjust the focus position.
Once focused, the image will remain perfectly sharp. Day, Night or infrared illuminated 24/24 in focus!

## VEHICLE INSTALLATIONS

## Unbush Vehicles Preparation



**1.** Hardware and software technological development to enhance the data capture ability also with non attended vehicle
**2.** Development of ergonomics and comfort on board to facilitate the staff efficiency in case of attended operations.
The technological development is based on the latest electronic product releases and their implementation.
We consider this last issue essential in a vehicle designed for the environmental data capture, as the variation of energietic performance of the onboard equipment allows for greater or lesser autonomy "on site" of the vehicle used for the operation, and the longer operating time available ensures a better service coverage.
The increased energietic efficiency allows for the lowering of operational costs as, since the start, it is possible to reduce the accumulators which then during their use, will require a lower number of recharges and therefore will have a longer lifetime to the benefit of the life costs; in particular we focused on tested litium-ion battery packages in the mean time we are already exploring the fuel-cell technologies.
The increase offer of new equipment by the electronic market "broadcast" has meant that today we can get high-profile professional equipment which can be furtherly adapded by our technicians to the particular service specifics to whom they are intended.
We have equipped the "TMP.21"module with a monitor LCD touch screen TFT 19" managed via proprietary software, to be used as an audio console in combination with an equalizer with 32 bands; the other touch screen TFT LCD Monitor 19 "displays in real time the image scanned on HD and can be sent to the Operation Center, shot either by only one selected camera or as a omni-comprehensive multiscreen shooting of all the images captured by all the onboard cameras.
Of each camera's image is made a back-up which can be displayed on operational LCD/TS monitors, interfaced with a multisplit group for cyclic multisplit for the scanning of the images shot by the hidden cameras. The cameras are to be selected in three groups : the first group is composed by perimetral surveillance cameras (auto iris objectives with fixed focus pin-hole), a second group is that for the "actions" shooting with manual or motorized swing (auto iris interchangeable zoom lens CS pace and day/night type), the last group is composed of thermoghaphic cameras in the various necessary configurations.
In addition to the equipment we offer a Long-Distance kit that allows the total remoting of input and output in order to make the vehicle totally unattended in the possible occasions of high risk; the kit allows in addition to the remoting of signals, the bi-directional dialogue with the remote operator to make the vehicle "active".

## Environmental attainment and detection Seat

Like all seats **TMP-Seat** also has settings which are considered "classics" and then:
**1. Recliner**
**2. Seat tilt**
**3. Adjustable armrest**
**4. Dual slide**

**MA TMP-Seat** is more than a simple seat:

**1. Multifunction joystick**
The primary functions at your fingertips. Ever!
**2. Multimedia armrest**
Blue Tooth + + RCA + USB + IPOD etc..
**1. Personal Storeroom**
Spectacles and small personal items always safe.
**2. Footboard bi-functional**
Comfort for legs and energy recovery at zero cost.
**5. Display of pre-vision**
Pre-view control from any source.
**6. Headrest audio-active**
Stereo sound within earshot in total freedom.
**7. Roomheating**
Thermostatically controlled heating directly in the holder

Covering made of genuine leather with forced microairation all over the seat surface.
Antennas integrated into the structure.

## TMP-Fuelcell - Reliable energy wherever, whenever you need it

**Robust industrial construction**
TMP-Fuelcell are delivered in a robust metal casing. The integrated user-interface allows monitoring and control directly on the unit.
**More freedom when refuelling**

TMP-Fuelcell can be hooked up directly to all TMP-Fuelcell Cartridges. Selecting the optimum size of fuel cartridge for your requirements allows you to optimise the weight and operating time of your appliance.
**More flexible installation in your appliance**
TMP-Fuelcell can be fitted in your appliance in a variety of ways. Thanks to the extended fuel cartridge hose, the positioning of the fuel cartridge can be chosen freely for example beneath the TMP-Fuelcell.
**One for all - charges 12 V and 24 V batteries**
TMP-Fuelcell are compatible with 12 V and 24 V batteries. The integrated charge control system identifies the battery in use and automatically adjusts the charge process accordingly
**TMP-Fuelcell 1600 Longlife**
TMP-Fuelcell 1600 is optionally available as long life version. When purchasing a TMP-Fuelcell 1600

## TMP-Fuelcell Cube - Plug & Play - the complete solution for off-grid power

**Key Features:**
- Flexible configuration
- Can be hooked up as a mobile unit or integrated into the appliance
- Ready for use immediately
- Suitable for outdoor applications
- Hybrid compatible - e.g. as backup for solar energy system

**Everything in one box**
The box accommodates all the components: the TMP-Fuelcell, TMP-Fuel Cartridges in all available sizes and the battery. Everything has its place!
**Once configured, ready for use anywhere**
The TMP-Fuelcell Cube is easy to set up, has a low maintenance requirement and allows your application to run independently for a long time. In other words, the TMP-Fuelcell Cube saves you time and money.
**Easy to conceal**
The compact design and impressively quiet operation of the TMP-Fuelcell Cube gives you an energy supply system which remains comfortably out of sight and earshot. There is no solar panel visible from a distance and no rattling generator to indicate that energy is being produced.
**All the benefits of the TMP-Fuelcell**
The TMP-Fuelcell Cube is compact and lightweight when measured against alternative energy systems, and allows your application to run independently for a longer period The fitted charge control unit allows it to be linked up easily to a solar system as well.

## SYSTEM INTEGRATOR

## New Products
## Overview and Market Segments

### Government & Defense

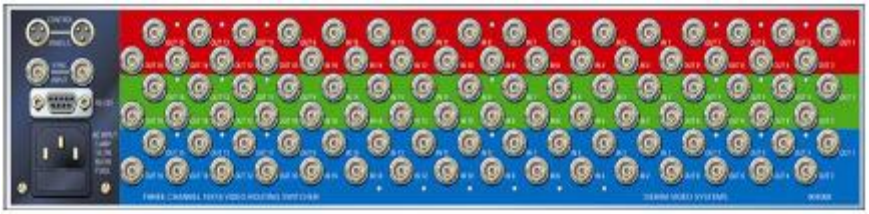
**Systems and Applications:**

- Command and Control Centers
- Transportation monitoring

- Civil; Defense; Military and Security Applications
- Training and Simulations (Defense & Military)
- Customized and Large Size Projects

**Q-70 Console**

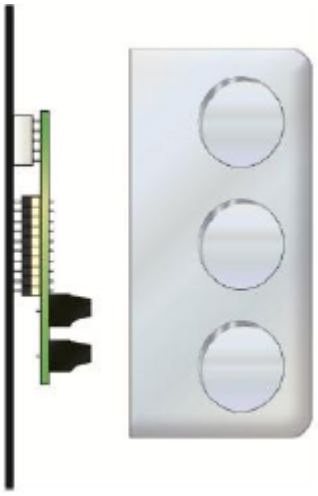
**Shipboard Display Console**
**Used on Multiple Programs Including Q-70 and NAVC2PRD**
**Ruggedized 2RU version of Sierra Pro 1616V3**



## New Products

**Wall Plate Control Panel**

**SCW-116**



- **Designed for MBF Industries**
- **For Non-Technical Operators**
- **Other Applications: Classrooms, Podiums**

**Short Product Overview**

**Sizes:**

- 8x4, 8X8 ,12x4, 12x8, 16x8,16x16

**Reverse Matrix:**

- 8x16 and 16x32
- Stereo Analog audio optional

**Multi-Format Digital Routing Switcher**

**Features:**

- Modular Structure based on 8 X I/O Boards
- Routes Digital Video from 18 Kbps to 3 Gbps (units available in 1.5 Gbps and 3 Gbps sizes)
- Intelligent Reclocking (Automatic bypass for non-SMPTE rates)
- Equalizes up to 100m (Belden 1694)
- SNMP Alarms (Fans, Power Supplies)
- Redundant CPU & PSU
- GPI/GPO Contact Closures
- Control via RS-232, TCP/IP, RS-485 Control Panel Network

**Optional Modules:**

- Optical: 8 Inputs, 8 Outputs per card
- Digital to Analog Conversion Board for Monitoring (270 only)

**New Audio Frame**
**To be used with several SVS Models**

**Analog Audio:**

- **6464 Mono OR 3232 Stereo (3RU)**
- **128x128 Mono or 64x64 Stereo (5RU)**
- **Jumper Selectable (At the Factory)**

**AES/EBU:**

- **64x64 Balanced (3RU) on Phoenix Connectors**
- **128x128 AES/EBU Balanced (5RU) on Phoenix Connectors**
- **Un-Balanced AES/EBU uses 25-pin "D" Connectors**
- **BNC to DB25 Adapter Panels**

**New Product Family –"Juniper"**

- 88 HD3G
- 1602/1601 SDI-HD
- 1602/1601 With Clean Switch

**88 HD 3G**

- **1RU**
- **18 Mbps to 3 Gbps**
- **Available with all audio options**
  - E,EE,S, Embedded
- **Breakaway Routes**
- **Toggle Input Equalizers**
- **Toggle Output Re-Clockers**

**1602 & 1601 (HD)**

- Silent Switch
- Built-in Line Buffers

**Terminal Equipment**

- **Consortium of 17 Developers provide Terminal Equipment Modules for a Common 10-Slot Frame**
- **Common Control & Monitoring Software (Dashboard –supplied at no cost)**
- **SVS Currently Offering 28 Modules**

**Current Offering**

**10-Slot Frame (12 W/slot)**
**20 Slot Frame (6 W/slot)**
**Distribution Amplifiers**
**Digital to Analog Converters**
**Analog to Digital Converters**
**UP/Down/Cross Converters**
**HD/SDI Frame Synchronizers**
**Audio Delay Modules**
**Embedders/De-Embedders**
- **Audio Conversion**

**Frame Options**

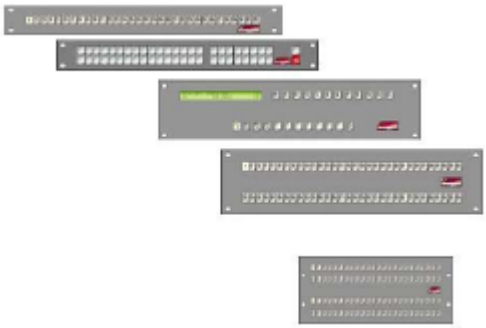
- Redundant Power Supply
- 100 BNC Rear Panel
- Network Card for Dashboard Communication
- Software Option for SNMP Monitoring

**Dashboard**

- **OpenGear Control & Monitoring Software for Frames and Modules**
- **IP Interface**

**SVS Software Control and Control Panels**

2.0 = GRIP Replacement
3.0 = TyLinxPro NET



**Features:**

- Network-enabled with unlimited client workstations
- Provides complete administrative, configuration and control functions
- Shared/saveable database for off-site data storage
- Windows & Mac* compatible
- Supports multiple routing switchers
- Provides retrieval of source and destination names, recorded/stored routing commands, and Virtual Room Grouping
- Ethernet (IP) or RS-232 serial communication

**Console Player View**

**GRID view**